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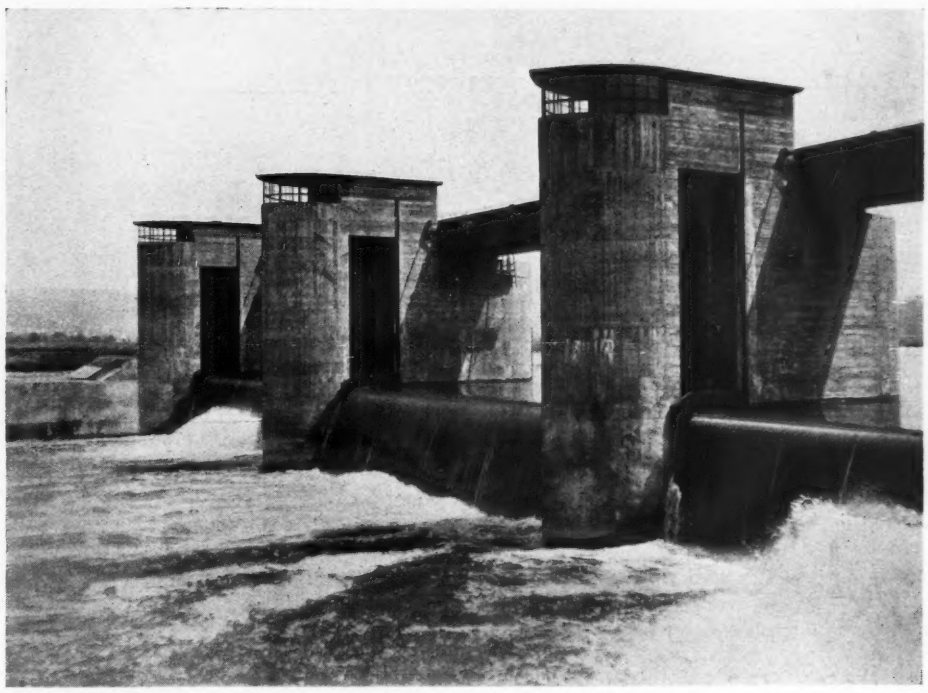


From the R.I.B.A. Exhibition of International Architecture.

NECKAR CANAL WORKS. PAUL BONATZ, Architect.

MEETINGS

FRIDAY, *December* 7.

Institution of Structural Engineers (*Western Counties Branch*). Mr. Gower B. R. Pimm on "The Code of Practice for the Use of Reinforced Concrete in Buildings." At the Merchant Venturers' Technical College, Bristol. 7.15 p.m.

Plumbing Trades. Mr. W. H. Draper on "One-Pipe System." At the Wandsworth Technical Institute, S.W.18. 6 p.m.

Institution of Municipal and County Engineers. Meeting of the Metropolitan District. At the Road Research Laboratory, Harmondsworth. 3 p.m.

Institution of Mechanical Engineers. Mr. Hal Gutteridge on "Factory Planning." 7 p.m.

Chartered Surveyors' Institution (*Hants, Dorset and South Wilts Branch*). Debate on Marquess of Lothian's Paper, "England's Country Houses." At the County Hotel, Salisbury. 1 p.m.

MONDAY, *December* 10.

Chartered Surveyors' Institution. Mr. Alan E. L. Chorlton on "The National Water Supply." 6.30 p.m.

TUESDAY, *December* 11.

Royal Sanitary Institute. Mr. H. G. Clinch on "The Moyne Report on Housing." 6 p.m.

Institution of Structural Engineers (*South Wales and Monmouthshire Branch*). Mr. Rees on "Suitable Structures for Power Stations." At the Baltic Lounge, Castle-street, Swansea. 7 p.m.

Illuminating Engineering Society. Mr. H. E. Bloor on "Flood Lighting by Gas." At the Institution of Mechanical Engineers, S.W.1. 7 p.m.

WEDNESDAY, *December* 12.

Royal Society of Arts. Mr. Allan Walton on "Furnishing Textiles." 8 p.m.

L.C.C Central School of Arts and Crafts. Sir Banister Fletcher on "French Renaissance (1475-1900): The Louvre and the Tuileries, Paris." 6 p.m.

Chartered Surveyors' Institution (*Quantity Surveyors' Committee*). Annual Dinner. At the Café Royal, W.1. 7.30 p.m.

Chartered Surveyors' Institution (*North-West London Branch*). Mr. Lawrence E. Tanner on "Some of the Treasures of Westminster Abeby."

Institution of Structural Engineers (*Lancashire and Cheshire Branch*). Mr. A. Ramsey Moon on "Welding as applied to Structural Steelwork." At the College of Technology, Manchester. 7 p.m.

Society of Chemical Industry. Colonel A. C. Hughes on "Tar and Bitumen for the Surface-dressing of Roads." At Burlington House, W.1. 7.30 p.m.

British Science Guild. Dr. G. W. C. Kaye on "Sound and Noise." At 21, Albemarle-street, W.1. 9 p.m.

Institution of Heating and Ventilating Engineers (*Birmingham and District Branch*). Mr. W. Brookes-Ward on "Pumps for Heating Installation." At 95, New-street, Birmingham. 6.30 p.m.

THURSDAY, *December* 13.

London Master Builders' Association. Annual Dinner. At the Connaught Rooms, W.C.2. 7 p.m.

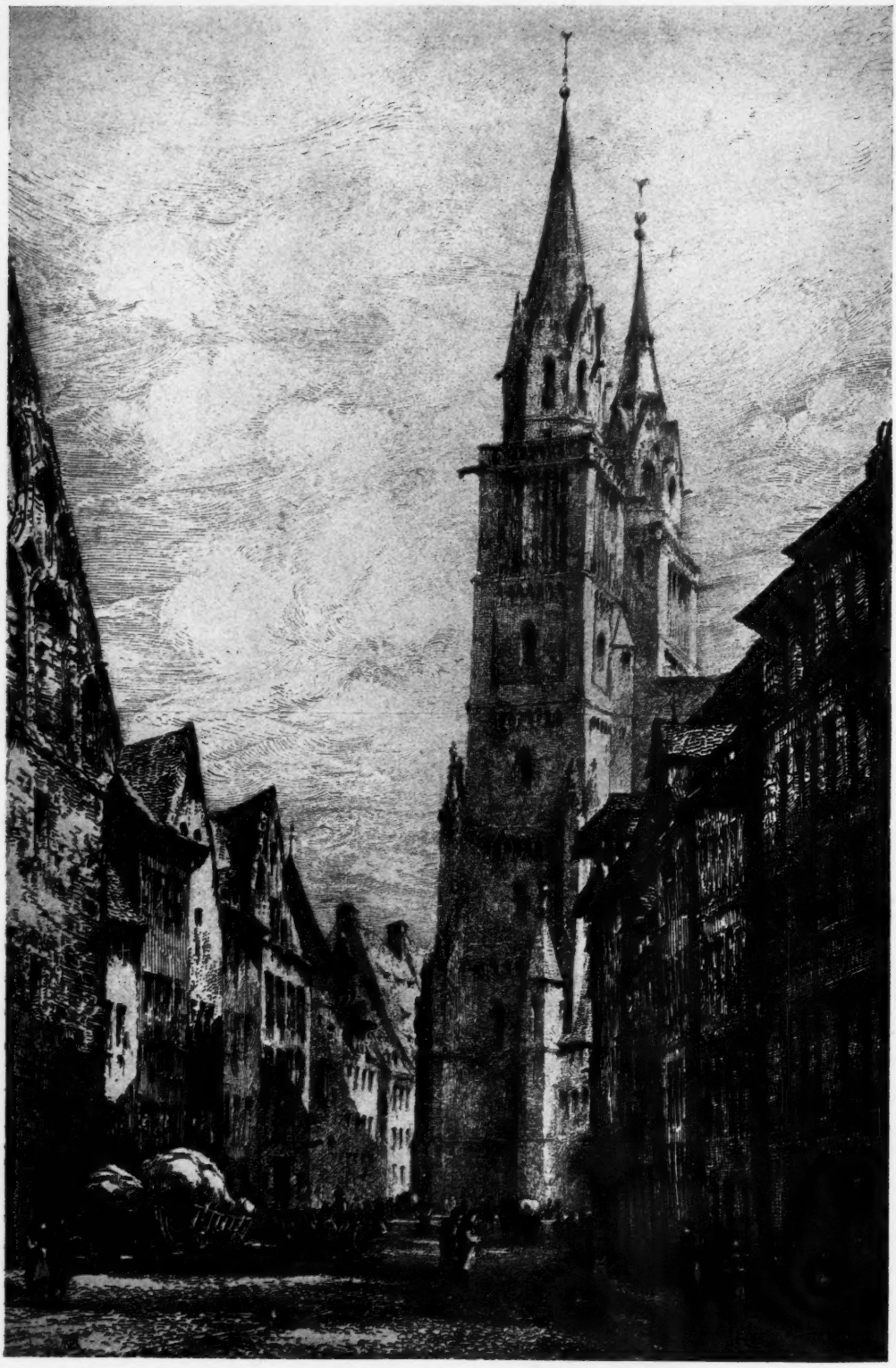
Institution of Structural Engineers. Mr. C. E. Reynolds on "Code of Practice for Reinforced Concrete." 6.30 p.m.

Chartered Surveyors' Institution (*Junior Organisation*). Mr. Kenneth Seymour on "The Logical Application of Legislation to the Slum." 6 p.m.

Chartered Surveyors' Institution (*Scottish Branch*). Mr. J. MacAulay on "Glasgow's Planning Problems." At the Ca'doro Restaurant, Glasgow. 7.30 p.m.

Society of Antiquaries. Dr. Grahame Clark on "Recent Excavations in the Cambridgeshire Fens"; and Professor Tancred Borenins on "Excavations at Clarendon Palace." 8.30 p.m.

Incorporated Institute of British Decorators. Mr. Hugh Munro on "The Colour Note in Modern Decoration." At the Royal Station Hotel, York. 8 p.m.



THE KONIGSTRASSE, NÜRNBERG.

From a drawing by the late PROFESSOR BERESFORD PITE.

(See page 969.)

UNLIMITED COMPETITION AND THE BUILDING INDUSTRY

TWO statements of outstanding importance to those concerned in the building industry have been made recently. The first of these was by His Royal Highness the Prince of Wales during his address at the Centenary Banquet of the Royal Institute of British Architects at Guildhall, when he said: "To-day we are not the race of individualists we were in Victorian and Edwardian times. We are now living—mostly because of the results of the World War—in a world which is more collective in principle than individualist." The second statement occurs in one sentence from the Report of Political and Economic Planning on the Housing Problem, which we refer to elsewhere. This sentence reads: "The building industry is changing from one based upon tradition to one based upon scientific research."

The building industry consists of a very large number of small units. It remains probably the most individualistic of all industries for that reason. It may be held that if the industry had no one else to consider, it might reject such views, but touching as it does on almost all other important industries, some of which have reorganised, or are reorganising, on a modern basis, there are those who believe that it must face the necessity and attempt to blend all that is best in the past with the many advantages that can accrue from collective effort and scientific research. Some of the manufacturing industries allied to building have reorganised, with undoubted resultant improvement to the service that they can offer to their clients, and a substantial advantage to their own economic position. A possible danger of these reforms is, however, that until the consumer is equally well organised, there may be a swing over, and the consumer, instead of being able to get cut prices, may have to pay more than necessary, even for the improved service.

Arising out of these reflections the following further observations may be submitted *apropos* of the "Pep" Report, though in a spirit of inquiry only and with the object of eliciting the opinions of others. The contracting section of the building industry appears to be suffering from unlimited competition, with its corollary, lack of collective bargaining power. The system of unlimited competition is utilised considerably, and even when competition is to some degree restricted, it is not necessarily limited to firms of equal status for the various classes of work required. Competition in present circumstances is necessary, but unrestricted competition or unequal competition tends to encourage and perpetuate conditions in which "price" is the predominant factor, insufficiently related to the service expected under the documents governing the contract.

There is a widespread belief that it is essential to remedy this state of affairs, just as much for the benefit of the building owner as for the contractor. The reorganisation necessary, it is thought, does not involve the exclusion of an individual or contracting unit because of its size. It does demand the substitution of what has been termed "rugged individualism" for individualism based upon "planned effort." Firstly, the individual must have a thorough knowledge of his own subject, but it must not stop there as it so often does at present. He must, in addition, be in "technical sympathy" with those whose work bears on his. He must be able to appreciate the contingent problems arising out of his work and the respective contributions required by each individual of each grade towards their solution.

Be that as it may, in the contracting section of the industry overlapping is no doubt rife. The worst feature arises through unlimited competition, and a correspondent, writing to us on the subject, puts the case thus: "Up to thirty firms tender for work which only one firm can get. Each of these firms is continually doing this and must keep permanently or employ temporarily a staff for that purpose. They will be lucky if they get 10 per cent. of the work for which they tender. To this 10 per cent. of work and other work obtained must be added the 90 per cent. of overheads arising out of the form of competitive work referred to and which they do not get. It seems difficult to deny that this is uneconomic use of highly skilled effort, a heavy unproductive expenditure to the industry as a whole and a waste for which, in the long run, the building owner must pay. Another cause of waste, greater in its effect than it may appear, arises from the sense of rush which appears to increase in proportion to the nearness of receiving tenders, and has become almost ingrained in those whose services immediately precede this stage. Study of the time taken in the earlier processes and in subsequent discussions shows that this rush is usually fruitless in getting the actual building completed any quicker. On the present system of tendering in use generally it adds to costs by heavy overtime rates and by the delays which result from subsequent alterations, amendments and variations of the scheme, and aggravates the rush and slump system."

All these things require investigation through the collaboration of all concerned. In its early stages such investigation seems likely to show that the initial remedy lies in determining the scope and limitations of the duties of each of the various sections concerned and the necessity to organise to utilise them to their best advantage. The next stage may show that nothing can be done without statistical information on broad lines, as we have previously suggested. Following this may come the revelation that scientific research and its practical application are necessary in many more directions than is at present possible, and the result of these efforts may reveal the possibility of establishing long-term contracts with steadier load, always provided welfare work can be removed from individual to industrial effort, and proper superannuation funds can be arranged by the industry as a whole. If enlightenment has not been reached by then, the realisation may well come as a sudden shock that none of these things can be done on the present system because there are no funds available.

It follows from such generalisations that a modification of the competitive system is the possible remedy, and that the technique of tendering must be adjusted to meet the new circumstances and increase true speed with less hustle. There would need to be definite agreement amongst sections, units and individuals concerned that the lowest tender must cover not only the cost of labour, material, transport, overheads, and a reasonable margin of profit, but it would need to include a sufficient margin to permit the individual or unit to make his contribution to those collective services which have acted so much in the interests of other industries.

It is not considered that this would increase the cost of building to the owner, if the organisation is properly conceived. The steadier load which would be possible, the provision for old age, the powerful negotiating power with manufacturer and merchants which would arise from a united contracting industry, the increased efficiency in the internal economy of the industry, would lower prices by the elimination of waste and the more certain conditions that could be offered by long-term arrangements, to an extent probably more than the increase necessary for the essential services. The result would be an industry well planned which could envisage a steady flow of work over a considerable period, giving permanent employment, making provision for the increase necessary for the essential services which have added so much to the prosperity of other branches of industry.

NOTES

Nash's Stucco Architecture.

THE occasion of the first ordinary general meeting in the new R.I.B.A. building in Portland Place drew a large audience on Monday evening to hear a very interesting paper on John Nash, by Mr. John Summerson, a report of which is given in this issue. It has been said that everything becomes "history" after the lapse of a hundred years. A hundred years have passed since the building of old Regent-street, and already it is less than physical history—it is a memory. Nash's fate was that he built in a fragile material, and it was interesting to learn from Mr. Summerson that he used stucco only because he could not obtain Bath stone—which, of course, he used at Buckingham Palace. Whether his buildings in Regent-street would have been spared longer had they been built of stone, is an interesting but profitless speculation. Now that so much of his characteristic work has disappeared its merit is beginning to be appreciated, and we were glad to hear Mr. Ormsby-Gore, First Commissioner of Works, express the opinion at the meeting that what remains of his work should be preserved. Nash may have "left us all plaster," but his stucco buildings, especially when newly painted in the spring, have a note of picturesque gaiety that can ill be spared from the London landscape.

The R.A. Exhibition of British Art in Industry.

IN accordance with the usual practice of the Royal Academy during their Winter Exhibitions, a panel of lecturers is prepared to speak on the general scope of the forthcoming Exhibition of British Art in Industry, opening on January 5, and on particular industries represented. The same facilities which are offered to schools and educational institutions are now being extended to industrial concerns, manufacturers, and the retail trade. They are invited to avail themselves of the services of the lecture panel, members of which are willing to speak to employees at the premises of the industry. The subjects for lectures include: Modern Architecture; Furniture and Interior Decoration; Domestic Appliances, including Lighting, Heating and Cooking; Pottery; Glassware; Plastic Mouldings; Book Production, including Illustrations and Binding; Posters and Commercial Printing, and Craftsmanship in Industry. The Exhibition has been organised jointly by the Royal Academy and the Royal Society of Arts with the following objects in view:—To impress upon the public the importance of good design in articles of everyday use; To show, not only to our own people, but also to other nations, that British manufacturers, in co-operation with British artists, are capable of producing, in all branches of industry, articles which combine artistic form with utility and sound workmanship; To encourage British artists to give to industry the benefit of their talent and training, so that the objects with which we are surrounded in our daily lives may have an appearance which is not only attractive, but is based on genuinely artistic principles. The scope of the Exhibition embraces a wide range of articles, including: Furnishing Fabrics; Ceramics; Glassware; Gold, Silver and Jewelry; Leatherware; Book Production and Commercial Printing; Domestic Equipment; Furniture and Interior Decoration; and Plastic Mouldings. A special feature of the Exhibition will be the section of window displays, which will be changed from week to week.

The Seaside.

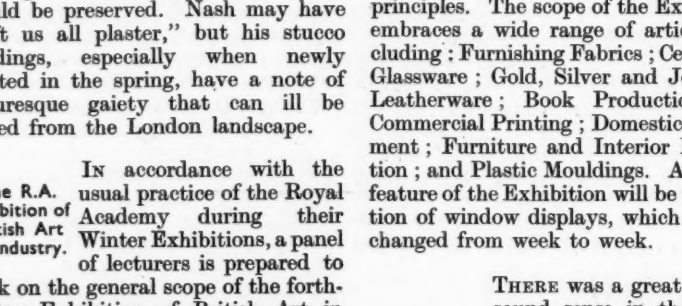
THERE was a great deal of sound sense in the interesting lecture on the "Seaside" which Mr. F. R. Yerbury delivered before the Architectural Association last week, a report of which appears elsewhere. When we compare the orderly development of Brighton and those coast towns which were the first to provide accommodation and entertainment, when sea bathing and seaside holidays became fashionable, with coast towns which shall be nameless, which have grown up in recent times, we must realise the value of proper planning and good architecture as contrasted with haphazard development and a selfish disregard for the amenities and the protection of the lovely coast scenery of this country. We must all agree with what Mr. Yerbury had to say as to preventing the erection of flimsy, badly designed bungalows and shacks of all kinds, and especially his observation in reference to certain developments on the Kentish coast being thoroughly unsound and unfair to the nation; but we are rather doubtful of his suggestion that "every provision" should be "made for the full-blooded exuberance which came to a person with the sea breeze when released from the drudgery of the rest of the year," though this may be qualified by the preceding belief that "The family taking its all too brief fortnight in the summer should be allowed to do within reason almost exactly what it liked."

Competitions.

MR. E. BERRY WEBBER, F.R.I.B.A., addressing the Birmingham and Five Counties Architectural Association recently on the subject of Competitions, strongly advocated them as giving young architects their chance. Quite a large number of our leading practitioners whose names it is unnecessary to mention owe their success to competitions. These open competitions are the one chance for the brilliant student or assistant, of whom there are so many trained at the Architectural Schools. Success in competitions is only obtained by constantly competing and by attacking problems with method and experience. Success is encouragement to further effort, which often ends in an assured position and to the appointment to assessorships. A successful competition winner makes a good assessor, for he inspires those who compete. Referring to the younger architects Mr. Webber said: "I have been really disappointed lately by the poor response in some competitions. I think you are missing a great chance. Have a go! If you can't take a licking you ought not to be an architect!"

The Industrial Situation.

ACCORDING to the monthly review for December, issued by Lloyds Bank, Ltd., internal trade continues to improve. "There is now no doubt that the revival has persisted into the autumn months, and notwithstanding unfavourable conditions over most of the Continent, there is every prospect that home trade will remain relatively good at least until next spring. The slight increase in the general percentage of unemployment



From the R.I.B.A. Exhibition of International Architecture.

MINISTRY OF PENSIONS, PRAGUE.
HAVLICEK AND ING KAREL HONZIK, Architects.

From the R.I.B.A. Exhibition of International Architecture.

TOWER OF NEW YORK CENTRAL STATION, BUFFALO.

during October is purely seasonal, being largely due to a decline in the amount of work available in the building, transport and distribution trades, and in hotel and boarding-house services. The approach of Christmas should bring about a temporary improvement in some of these trades. Meanwhile employment became better during October in the clothing and textile trades, in the heavy industries, the motor trade and in certain miscellaneous trades." Production in the heavy industries remains relatively good. Returns of new building plans, which were disappointing in September, recorded in October an increase of 20 per cent. over the plans passed in October last year. Consumption of electricity in October was not quite up to the September level, but is still considerably above the consumption for October, 1933. Wholesale prices, though still inclined to fall, have become much steadier than in September, and raw material imports have improved after their September set-back.

Building Statistics.

THE current *Board of Trade Journal* indicates that "plans approved by 146 local authorities for dwelling houses," during October, are 22 per cent. better than for September, and a similar percentage better than for October, 1933. Plans passed for "other buildings" are appreciably in excess of the previous month's figures and no less than 35 per cent. better than for October, 1933—an encouraging sign. Unemployment rises by 0.9 per cent. to 17.6 per cent., and by 0.8 per cent. to 46.7 in the case of men engaged in public works contracting.

The Late Miss E. M. Rope.

THERE has lately died a woman sculptor whose work has been frequently mentioned in these pages—Miss E. M. Rope—who was well known for her decorative panels in coloured and uncoloured plaster. It was in plastic form that her vital personality found happiest expression. At Rotherhithe Town Hall, the main decoration of the council chamber consists of a panel 20 feet long, illustrating the history of shipping in the Thames. Large panels of the Annunciation, and of adoring angels, form the decoration of St. Joseph's Church, Aldershot, where they are set into walls faced entirely with blue-green tiles, the architect being Mr. G. Drysdale. Her friezes of children sporting in the waves are well known. She executed many memorials in marble, stone and bronze, among which are the marble relief of "The Angel of the Resurrection," in Salisbury Cathedral, that to Lady Dorothy Cuthbert, in the Private Chapel at Stanmer, Sussex, and that to Lady Walsingham at Merton Church, Norfolk.

Post Office Reforms.

WE have received a copy of a letter which has been forwarded to the Postmaster General by the Federation of British Industries on the question of Post Office reforms. After expressing their appreciation of the helpful action which has already been taken by the Postmaster General, the Federation asks for the further reforms, which, in its opinion, will be beneficial to industry. One suggestion has reference to the regulations in regard to parcels post, where the limitation upon the size of parcels is felt to be irksome. "As you are no doubt aware," the letter states, "one of the standard sizes approved by the British Standards Institution for plans and drawings is 40 in., and when the necessary allowance for margin and packing has been added, such packages become just too long to be admitted to the parcel post. A slight relaxation in the regulations would make these packages admissible, to the great advantage of the trades that make use of these plans."

Factory Planning.

THE paper on "Factory Planning," that was read recently, before a joint meeting of the Institution of Engineering Inspection and the British Works Management Association, by Mr. Hal Gutteridge, will be of value to all architects interested in factory buildings. The work of the architect who builds the factory and the engineer who designs the plant must, of necessity, be complementary if the factory is to be of the best type. It is only by close co-operation, based on an understanding of each other's problems, that the best work can be done.

Sir Giles Scott, in his inaugural address to the R.I.B.A. Centenary Conference, referred to the chaotic development of factory buildings in the south of England, and urged the need for improvement in design, planning and grouping. There appears to be room for a paper on factory design from the architect's point of view.

From the R.I.B.A. Exhibition of International Architecture.

WEYBRIDGE HOSPITAL.

MESSRS. KENYON AND LIVOCK, FF.R.I.B.A. Architects.

GENERAL NEWS

Proposed Hospital Extensions, Lancaster.

County Mental Hospital, Lancaster, have under consideration the erection of a reception hospital. Architects desirous of submitting their names are requested to send full particulars and details of experience to the Chairman of the Visiting Committee not later than December 17.

The A.A. Pantomime.

The students of the Architectural Association will present their pantomime at 8.30 p.m. on Monday, Tuesday, Wednesday, Thursday and Friday, December 10-14, with a matinée on the Tuesday at 2.45 p.m. As usual, the pantomime will be given at the Architectural Association premises, 34, Bedford-square, W.C.1. Tickets, 5s., 4s., 3s. 6d., 3s., 2s. 6d., 2s., can be obtained only by members of the Association.

L.C.C. Exhibition of Arts and Crafts.

Subject to the expenditure ranking for Board of Education grant, the L.C.C. has decided to organise an exhibition at County Hall, which will be mainly representative of industrial art work, and would include exhibits of such trades as the textile trades, furniture and wood trades, including wood carving, advertising and printing trades, pottery and stained glass, art metal trades (silversmithing, jewellery, etc.), and architecture, including sculpture and interior decoration. It will be held from March 4 to 16, 1935.

Bill for the Preservation of St. Paul's.

A Parliamentary Notice has been published indicating that application has been made by the Corporation of the City of London to bring in the City of London (St. Paul's Cathedral Preservation) Bill. The Bill provides for the prohibition or restriction, except with the approval of the Dean and Chapter of St. Paul's, of any work which might involve disturbance of the subsoil within a prescribed area in the vicinity of the Cathedral. Power is sought to enable the Dean and Chapter to require any deep level work to be stopped notwithstanding approval of plans, and provision is made for appeal to a tribunal by persons aggrieved by failure to obtain the approval of the Dean and Chapter to any plans.

Appointments Vacant.

Barking T.C. invite applications for (*a*) temporary architectural assistant—salary £300; (*b*) temporary architectural draughtsman—salary £250. Forms, obtainable from Mr. R. A Lay, A.M.Inst.C.E., Town Hall, returnable by December 17.

Applications invited by Exeter T.C. for post of architectural assistant on temporary staff. Salary £300 per annum. Applications to be sent not later than December 19 to Mr. John Bennett, F.R.I.B.A., City Architect.

COMPETITION NEWS

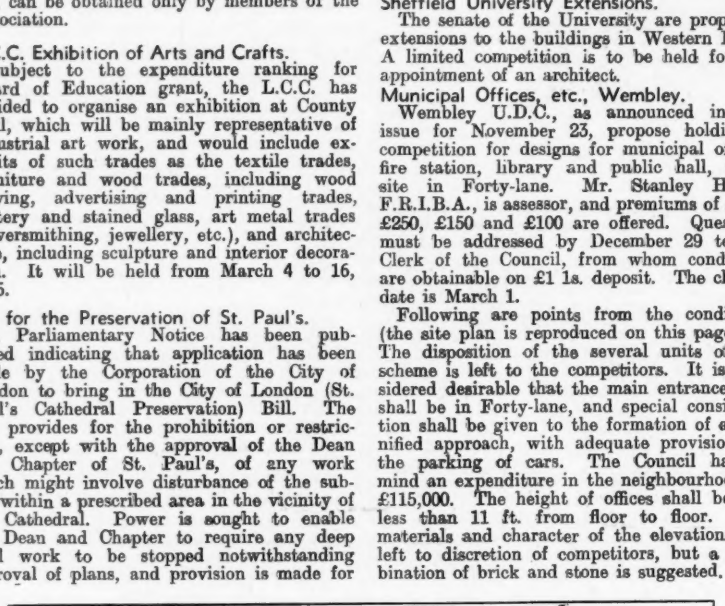
Sheffield University Extensions.

The senate of the University are proposing extensions to the buildings in Western Bank. A limited competition is to be held for the appointment of an architect.

Municipal Offices, etc., Wembley.

Wembley U.D.C., as announced in our issue for November 23, propose holding a competition for designs for municipal offices, fire station, library and public hall, on a site in Forty-lane. Mr. Stanley Hamp, F.R.I.B.A., is assessor, and premiums of £300, £250, £150 and £100 are offered. Questions must be addressed by December 29 to the Clerk of the Council, from whom conditions are obtainable on £1 1s. deposit. The closing date is March 1.

Following are points from the conditions (the site plan is reproduced on this page) :—The disposition of the several units of the scheme is left to the competitors. It is considered desirable that the main entrance hall shall be in Forty-lane, and special consideration shall be given to the formation of a dignified approach, with adequate provision for the parking of cars. The Council has in mind an expenditure in the neighbourhood of £115,000. The height of offices shall be not less than 11 ft. from floor to floor. The materials and character of the elevations are left to discretion of competitors, but a combination of brick and stone is suggested.



WEMBLEY MUNICIPAL BUILDINGS COMPETITION: SITE PLAN.

STANDARDISATION IN HOUSING

Much interest has been caused by the Prince of Wales's recent speech, in which His Royal Highness advised architects to study and practise the mass production of houses as manufacturers of motor cars and the directors of multiple shops have already studied and practised it in their own spheres. Mr. A. C. Bossom, M.P., F.R.I.B.A., in a letter to *The Times*, makes certain valuable suggestions as to how the methods and principles of mass production may be applied to the slum-clearance and rehousing proposals. He states :—

"I suggest that they (our administrators) would follow the same precepts and practices which their own experience has already triumphantly tested. They would estimate the housing needs of the nation and tackle them as forming one huge undertaking. They would compute—a much less difficult task than it sounds—the amounts of materials required. They would ascertain our present annual normal output of these materials and the number of available operatives. They would divide our yearly resources of men and material into the total national requirements in order to find out how long it would take to carry out the Government's programme without forcing the building industry into an unwieldy expansion to be followed by an equally unbalanced collapse. (A deficiency in any one section of the industry could be made good by starting the necessary plants and factories in the distressed areas.) Most probably they would split up the country into nine or ten areas, each self contained but intercommunicating, and all of them subject to central direction. Assuredly, since this is the essence of mass production, they would enter into long-term contracts with suppliers, manufacturers, and labour for the production of the thousand and one standard forms of fittings, accessories and appliances that every modern home ought to have. Finally, they would insist on the nation-wide adoption of a time and progress schedule by means of which everything would be planned and ordered in advance for the enterprise as a whole, for each area and for each job in each area, and a time-table drawn up for the completion of each unit of the undertaking by a given date.

"The nation wants a reduction of building costs. The building industry wants security and good wages. The suppliers and manufacturers of building materials, and the 30 odd trades associated with them, want the assurance that they can run full blast for many years to come. All these desiderata can be met and this blot on our civilisation removed by translating into fact the Prince of Wales's hint that in mass production may be found the answer to our housing riddle."

PROGRESS IN HOUSING

The first of what is intended to be a regular series of returns showing the progress made in the provision of houses, including those erected for the replacement of slum dwellers, was issued on Tuesday by the Minister of Health. During the half-year ended September 30, the record figure of 134,153 houses were provided by private enterprise, the figure for the whole year being 254,934. Since the Armistice, when the number of houses in England and Wales was just under 8,000,000, 2,484,848 have additionally been provided up to September, 1934. In the section of the report devoted to the work of slum clearance it is stated that the number of houses in clearance and improvement areas which are to be demolished as a result of resolutions passed is 73,046 up to September 30 this year. For the six months ended on that date the number was 23,434. The number of persons to be displaced as a result of the demolitions is 325,809. The number of houses completed for the rehousing of persons who have been displaced was 26,926 at September 30, and at that date there were 19,301 under construction.

THE LATE PROFESSOR BERESFORD PITE

By THEODORE FYFE.

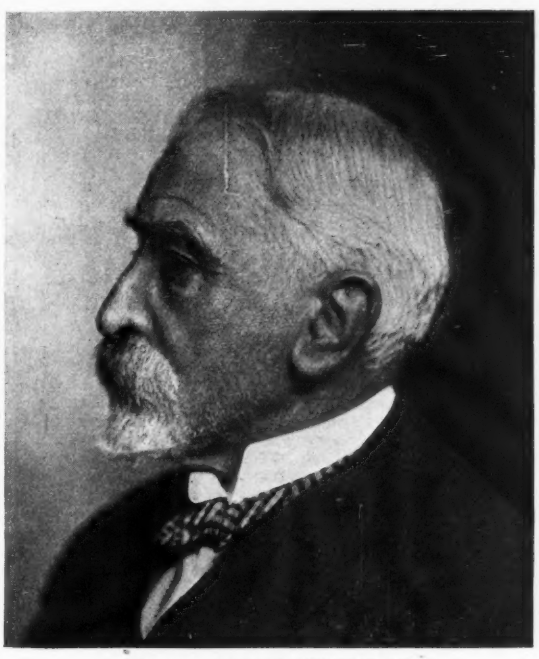
With the passing of Beresford Pite the world of architecture in this country loses a remarkable personality, whose early work in design is not as well known as it ought to be. I want to stress this side of his career, as he was known, latterly, chiefly for his work in architectural education. Though it is true that after his appointment at the Royal College of Art in 1900, he began a new phase which was intensified, after 1905, by his work at the L.C.C. School of Building at Brixton, Pite never abandoned his creative work in design, and his largest London building—the Insurance Office in Euston-square—was carried out in this period. It will probably be as a designer in brickwork, however, that Pite will ultimately secure his place among English architects, in the group which belonged to the very end of the Victorian era. Nowadays, of course, it is one of our chief difficulties that London buildings of modest dimensions built at that time have a tendency to disappear; and some of Pite's buildings have already either disappeared or have been altered beyond recognition. Of those that remain, mention should be made of (1) the St. Marylebone General Dispensary in Wellbeck-street (this is fairly well known and has a delightful back-entry in Marylebone-lane); (2) the building at a corner of Great Titchfield-street, originally built for the Y.W.C.A.; (3) the distinguished little front in Mortimer-street with sculpture supporting a pediment, originally built as a doctor's house; (4) No. 37, Harley-street, at the corner of Queen Anne-street — a stone building.

Other small works which I am not so certain about now were :— (5) the All Souls' Church Home in Great Titchfield-street, a very simple stock-brick treatment with an air of distinction and an admirable doorway, partly in stone; (6) a narrow stone front with a ground-floor shop in New Bond-street (on the W. side, very near Old Bond-street), the upper part of which was particularly good; the top story had a "basket-work" balcony and it was crowned by a segmental pediment with a carved keystone; (7) an equally narrow red brick and stone front with a continuous bay window above the ground story, in the northern end of Great Portland-street (E. side); (8) an octagonal church hall for Christ Church, N. Brixton, built very cheaply, in stock-brick, but with a masterly little belfry. Pagani's Restaurant, in Great Portland-street, is, of course, fairly well known, and it consists of more than the front. The restaurant proper is quietly treated, but excellent in its restraint. Few realise nowadays what an innovation it was, about 1900, to treat a coved cornice with the glazed mosaic that Pite devised, apart from the large handling of the front in general. Christ Church, North Brixton, will live for its exterior, altered considerably from the original scheme, but showing great cleverness in the use of brick with a sparing use of stone.

Brunelleschi and Michelangelo were his favourite masters of the Italian Renaissance, as his Cambridge students will well remember, but he recognised, to the full, the genius of Alfred Stevens. His early designs were imbued (whenever he could afford it) with the characteristic sculptural effects of Michelangelo and Stevens when applied to architectural work. Later, he became more of a Byzantinist and then a Greek Revivalist; but that he never lost his *flair* for daring treatments founded on the Renaissance can be seen in his handling of the new Piccadilly front of the Burlington Arcade.

In his design for Liverpool Cathedral he let himself go, but he risked failure in submitting a Byzantine type of design; and the vast congregational tribunes which were an essential feature of the plan must have been alien to the assessor's mind. At Uganda Cathedral, on the other hand, Pite attempted a severe Italian Gothic treatment in brick and concrete. Only those who have seen it will know what the actual result was, but it was as accomplished as ever in its handling of brick.

If it were possible to assess Pite's building style in stone treatments, it might be defined as one that was imbued with the lessons of certain phases of the Italian Renaissance, but strongly tinctured with an original rendering of Greek detail. In his brick buildings, on the other hand, especially where stone was sparingly employed, he was in the direct tradition of Philip Webb, for whom he had a great admiration; and he carried on the tradition of Webb's wrought-ironwork, the excellence of which he was never tired of extolling. He was intimately acquainted with the working of G. E. Street's office, and was possibly in that office himself for a short time. He appreciated Street's work to the full, and even more, the work of Butterfield,



THE LATE PROFESSOR BERESFORD PITE.

Pearson, G. G. Scott, Bodley and Bentley. He knew more about this later Gothic phase than anyone I know of. Though there was this strong Gothic background in his sympathies, and though, in his later days, he championed the work of Alfred Waterhouse, his constructive common-sense made him reject Gothic in his own secular work, and (so far as I am aware) in his ecclesiastical work, except at Uganda.

So far, I have said a lot about Pite's design work, but very little about himself. I need not repeat what I have said elsewhere, but I can refer to the respect, amounting to affection, which he inspired in his assistants; and to his equal solicitude for them. He regarded "Sandy" Wingate—who only left him to take up his own practice and was killed in the Great War—almost as a son. In his later days he had a remarkable gift for bringing on pupils, especially foreigners, for whose difficulties he had a sympathy amounting to genius. The Egyptian Government were well aware of this, and at one time he had several young Egyptians in his office. At the Royal College of Art he was perhaps more of an inspirer of architectural draughtsmanship than of positive design, but it was draughtsmanship of the thoroughly practical kind, and he quite rightly saw the value of fine interpretation by drawings, of unique Greek and Renaissance treatments. He did yeoman service at Cambridge in the formation of the School there, and more recently, in the years before his retirement, he was valued as a member of the Faculty Board of Fine Arts, for his lectures, and for his supervision of students. Of his oratorical gifts it is needless to speak. When his fine head, irongrey even at 35, was raised slowly at a crowded meeting, his audience knew that they could settle down comfortably and listen to an exceptionally comprehensive and almost unfailingly humorous speech. The great gift of humour enabled him to make the best kind of fighting speech when the occasion called for it. In another walk of life he would have made a brilliant advocate. His great interest in books and in all that pertained to the scholarly side of his art, was unfailing to the end.

PROFESSOR PITE'S CAREER.

Mr. Beresford Pite, whose death at the age of 73 was recorded in our last issue, will go down in architectural history as a great professor of architecture. Such men are rare; many there are who have a sound knowledge of architecture, but those who can fire the imagination of the student and fuse knowledge with inspiration are few. Beresford Pite was among them, nor will he soon be forgotten.

His own architectural education was thorough. After leaving King's College School he was articled to Messrs Habershon and Pite, his father's firm, and studied also at University College, at the Normal School of Art, South Kensington, and the Royal Academy Schools. His early career was distinguished by the gaining of two prizes, the Donaldson Medal at University College, 1879, and the Soane Medallion in 1882, the latter with his design for a West End club-house. This design (reproduced in *The Builder* for July 27, 1923) created a veritable furore in architectural circles, as much for the brilliant draughtsmanship as for the extravagantly imaginative design.

In 1881 he entered the office of John Belcher, R.A., with whom he remained for some years, with a brief interval in which he served on the staff of *The Builder*. It is probable that while with Belcher he collaborated in many works, notably the building for the Institute of Chartered Accountants. About 1897 he set up on his own account, and was responsible for a number of buildings in which, of those that remain, the hand of a scholar is evident.

Pite's reputation is, however, more likely to rest on his notable work over nearly a quarter of a century at the Royal College of Art. In 1900 he was appointed to this post, and his services were acknowledged in a dinner given in his honour on his retirement in 1923, suitably enough, at Pagani's Restaurant, where many leaders of the profession gathered under the chairmanship of Mr. W. R. Davies, C.B. Some remarkable tributes were paid to him, of which Paul Waterhouse's was typical. "'Worthy' (said Waterhouse) is the word I should like to apply to such a man as Professor Pite, and I cannot help realising that his life has been throughout one of unselfishness and devotion to his art. He has shown a reverence for his art by giving many years of his life to teaching others, without any attempt at self-aggrandisement—all to his honour and glory."

Beresford Pite was also for nearly 24 years Architectural Director of the L.C.C. School of Building, Brixton, from which he retired in 1928. He was a member of the Board of Architectural Education, and of the Board of Architectural Studies at Cambridge. In 1896 he was President of the Architectural Association.

JOHN NASH.

A PAPER on John Nash was read by Mr. John Summerson, A.R.I.B.A., at a meeting of the R.I.B.A. held on Monday evening at No. 66, Portland-place, W. The President, Sir Giles Scott, R.A., occupied the chair. The lecturer said that all but a hundred years had passed since John Nash died, but his memory had been held in honour for less than a third of that time. We praised him now as a great planner and an able architect, but it was only yesterday that his name was a target for every shaft of contempt and malice which could be levelled at a public man. It was customary to divide artists into two general categories: those whose achievements were level with the cultural plane of their age, and those who struck out from it towards a wider universality; those whose works were of significance only in relation to their times, and those whose art crystallised out of the flood of history and assumed what we felt to be a timeless identity. Roughly speaking, the first was the versatile, successful, extroverted type; the second was complex, introspective. It was to the first, the shallower type, that Nash belonged. Among his contemporaries, one must place him with Lawrence and Southey, rather than with Blake and Coleridge. In his own profession his opposite was John Soane. None of his buildings witnessed any real depth of thought or intensity of imagination. They were all derivative, and their greatest quality was charm, a charm which was personal, lively and often irresistible. The interest to be found in Nash was not the same as we expected to find in a Soane or a Wren. Nash was not a great artist. But as a man of affairs he was pre-eminently great. Architecture came within his scope; his powerful intellect grasped and wielded it, and all the influences of the age converged in the channels which he carved out for them.

John Nash was born in 1752, probably in or near London. The story of his early life was obscure, but the lecturer had established the following facts. His father, an engineer and millwright, came of a family of Kentish yeomen, and died when John was 8. His mother was Welsh. Probably through a rich merchant uncle he entered Sir Robert Taylor's office. His uncle died and left him a small legacy. Soon after this he left Taylor and started business as a carpenter, or what we should call a general builder. He moved from Lambeth to a house at the corner of Great Russell-street and Bloomsbury-square, which he faced with stucco as early as 1783; the house still exists. He speculated and became bankrupt. As soon as he was discharged he retired to Wales and made a new start, working in partnership as a builder, and subsequently alone as an architect. In five or six years he had a big local reputation. He was a social success also; the bankruptcy was forgotten; by 1796 he found it expedient to move back to London.

When Nash returned to London he was already 44, and he was 60 before Regent-street or the Park was begun. It was important to remember that. For it was not as a town architect that he came to London (though he had been concerned with town improvements at Abergavenny), but as a well-reputed country house architect, with three county gaols and the west front of a cathedral to his credit. And between 1796 and the beginning of the improvements in 1811 it was still houses which occupied all his attention.

If we reviewed his career as a whole, we found that it divided into four phases of roughly 20 years each, and that only the last phase was concerned with the works by which his name is now remembered. Adolescence and education accounted for phase No. 1; the bankruptcy and the Welsh practice for phase No. 2. Phase No. 3, covering the years when he was at the height of his powers, was the great country-house period, and it was upon that that the lecturer now wished to dwell.

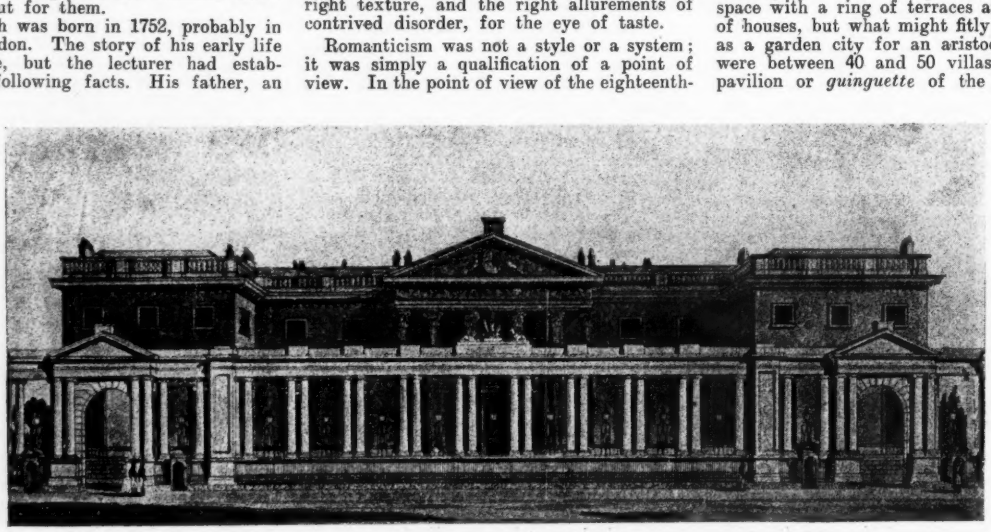
Repton's Influence.

Nash's phenomenal success as a country-house architect dated from his partnership with Humphrey Repton during the years 1797-1802, and the lecturer believed that we should ascribe to Repton's influence at that period much of the character of Nash's own work in later years. Repton was the greatest landscape gardener of his time, which meant that he was at the very heart of the romantic movement. Burke's æsthetic, woven round the concepts of the Sublime and the Beautiful, made landscape its starting point; so did Uvedale Price's corollary proposition, the "picturesque." Repton interpreted those ideas in terms of actual "improvement," pruning and ruffling the English scene till it possessed the right variety, the right texture, and the right allurements of contrived disorder, for the eye of taste.

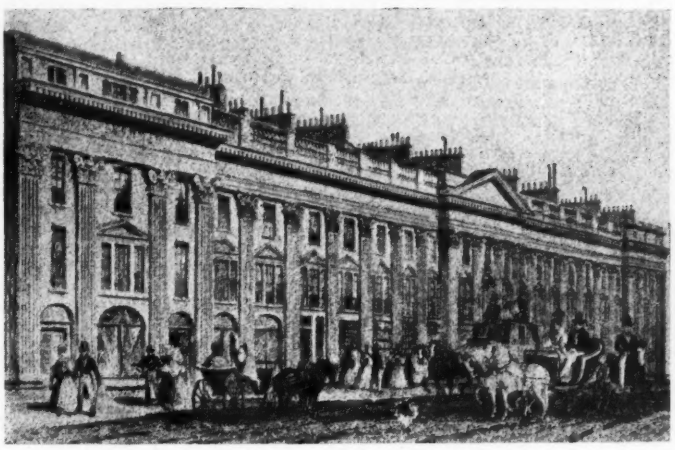
Romanticism was not a style or a system; it was simply a qualification of a point of view. In the point of view of the eighteenth-century artist one saw it emerging from renaissance classicism, whose strength it sapped and which it ultimately replaced. The two directions were constantly asserting themselves in dialectical conflict; classicism dictated symmetry, romanticism dictated asymmetry; classicism dictated an avenue with a temple at the end, romanticism dictated an avenue winding out of sight. Nash, like every artist of his period, was both classic and romantic, and the romantic part of him, both in attitude and technique, owed almost everything to Repton.

Having referred to contemporary developments in France, particularly in Paris, the lecturer said that in the month of August, 1814, the King of Prussia and the Emperor of Russia paid a state visit to the Prince Regent of England to celebrate the Peace after the overthrow of Napoleon. Nash had recently succeeded Wyatt in the office of Surveyor-General, though his duties in that capacity were, as a matter of fact, confined to royal buildings, under the Prince's immediate control. He had just finished the superb Corinthian suite and Gothic dining-hall at Carlton House, and so high did he stand in the Prince's esteem that his services were required in far weightier matters than architecture. In 1813 we even heard of him intriguing to bring the Whigs back to power. He was, of course, by this time a very great personage. With the exquisite and slightly scandalous Mrs. Nash, he entertained like an ambassador, and his house in Dover-street, which he (the speaker) regretted to say had been irreparably mutilated in the last few months, was almost as fine a rendezvous as the Lievens' next door or the Broughams' across the way.

The allied sovereigns could hardly have been impressed with the beauty of their host's capital, though he imagined that the Prince Regent was not slow to explain the improvements which were then just on the way. The guests were fêted in rooms specially designed by Nash, and after they had gone a belated climax to the festivities took place in St. James's Park, Nash providing a peculiar wooden bridge with a huge pagoda on the top of it. The design for Regent's Park and Regent-street was by this time some three years old. Park-crescent was already built, trees were being planted, and St. James's Market, opposite Carlton House, was under demolition. But the design which was taking shape did not tally in all respects with that which the architect had first devised; and as the Park as we knew it was even less like what its creator intended, the lecturer put on the screen some of the earliest drawings, which showed the plan as originally conceived. The scheme was to have been much more architectural than it actually is. Here they had, not an open space with a ring of terraces and a handful of houses, but what might fitly be described as a garden city for an aristocracy. There were between 40 and 50 villas, besides the pavilion or *guinguette* of the Regent, and



NEW CARLTON HOUSE AND SCREEN, FACING] WATERLOO PLACE.



PART OF OLD REGENT STREET AS ORIGINALLY BUILT.

the whole lay-out was dominated by the concentric circuses of the inner circle.

The next four slides showed portions of the panoramic views prepared, probably in 1811, under Nash's instructions. The Commissioners of Crown Lands had kindly allowed the lecturer to have them photographed in order to show them that night. Those designs had two characteristics. The first was that the handling of the landscape and architecture was thoroughly Reptonian; Nash and Repton had quarrelled years before, but here, without doubt, were belated fruits of the partnership. The second characteristic was that all the architecture shown was thoroughly French.

It was quite obvious that from the beginning of his career Nash had a strong leaning towards everything French. He deliberately chose one if not two French assistants; his library contained as much French as English literature; he was often in Paris; and his work, particularly his later work, showed an intimate knowledge of Parisian architecture. His famous gallery in Regent-street recalled Percier, the plan of Buckingham Palace obviously derived from that of the Palais Royal, and the Marble Arch was, of course, another Arc du Carrousel.

Nash's principal assistant at the time those drawings were made was Augustus Charles Pugin, a French émigré, who had joined him in Wales in the early 1790's. That Pugin made the drawings was exceedingly likely, especially as a note in French occurred on one of them. And he (the lecturer) suspected that Pugin sketched some, at any rate, of those villas out of his own imagination and not from designs provided by Nash. Although France and England were at war for most of the period 1800-1814, it was obvious that the two countries were not cut off from each other, as, for instance, were England and Russia after 1917. And Pugin knew and doubtless corresponded with many of the artists at the court of Napoleon I: Isabey, the miniaturist, for instance; David, the historical painter, and Lafitte, who designed the sculpture on the Arc du Carrousel. Actually, the Park in execution showed little enough French influence and the terrace façades were undoubtedly Nash's personal work. The Prince's *guinguette* and the formal strip of water in front of it, so reminiscent of the plans in Durand's book, were, of course, never built.

Regent-street.

As to Regent-street, large-scale replanning had always been at a disadvantage in England because of an obstructive reverence for the rights of the individual and a corresponding regard for public economy. A Louis or a Napoleon could drive a street, straight as an arrow, in any direction they chose. But England, resentful of dictatorship, had had to forgo the splendours of classical planning, and had even deprived herself over and over again of the ordinary amenities of convenience. It was Nash's greatest achievement that he completed a magnificent street without any dictatorial powers behind him. The whole thing was carried through by the encouragement of private enterprise under Act of Parliament; compensation was effected by the fairest possible means; and the outcome of the project was an impressive (if slightly delayed) addition to the public revenue.

Now it could hardly be expected that a street carried out under such conditions should be as straight and uncompromising as the Rue de Rivoli or the Nevsky Prospect; and, of course, Regent-street was not by any means straight. There was a twist at Langham-place, a bend at Argyll-street, and a curve at the Quadrant. This brought the lecturer to the principal point he wanted to make. For reasons arising from economic and sociological causes peculiar to England of the period, Regent-street wound and bent through London. But its crookedness was sanctioned by another equally English characteristic; he meant the romanticism which was manifested so conspicuously in contemporary landscape gardening and in literature and the arts generally. He supposed that a foreigner, favourably disposed to England of the Regency, might call liberty and the picturesque the two unique English contributions to Europe of the period, and he had no doubt that the two could easily be shown to be related to the same underlying causes and the same psychological weft. Both were clearly reflected in Regent-street.

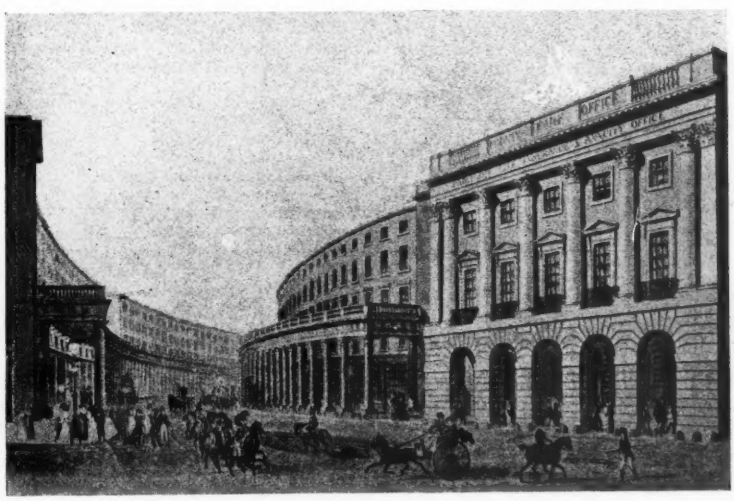
In Regent-street we saw a romantic use of classical material, but he imagined that the conception did not become clarified in Nash's mind until he was face to face with the problem in all its economic intricacy. His first design made a bid for regularity in the Napoleonic manner, with interminable colonnades *à la Rivoli*. He must have seen how ill that fitted with a system of letting to speculative builders by plots and groups of plots, and he knew how admirable such a street as the High-street at Oxford could be, with its fortuitous disposition of long façades and little houses. So he abandoned regularity and took the opportunist course—opportunist in the Reptonian sense, for a landscape gardener's first duty was to pursue the opportunities (what Brown called "capabilities") of his medium. What could be more in Repton's style than the Quadrant, that romantic avenue which wound out of sight?

It was needless to emphasise the picturesque variety of the façades which flanked the old street. As a rule, where one speculator took a number of plots, they were united by a distant façade, unless the scenic requirements of the street called for a more broken treatment, in which case Nash did not hesitate to concoct an arbitrary frontispiece.

In defining Nash's status among the metropolitan architects of early nineteenth-century Europe, the lecturer suggested that there were two aspects to be considered. The first was Nash's provincialism, his slick derivations from Paris, his capitulation to stucco and cast iron as substitute materials, and his somewhat pretentious superficiality. That was the unfavourable aspect. Against that they could set a solid and unique achievement—namely, the welding of English landscape romanticism into the hard facts of town-planning in nineteenth-century England. Only a very great man could have achieved that—a man who was a supremely great contriver as well as an artist of no mean rank. Such men were rare.

Points from Discussion.

Mr. C. L. Stocks, Permanent Commissioner of Crown Lands, proposing a vote of thanks to the lecturer, said that the site of Regent-street at the end of the eighteenth century was a mass of little streets, impenetrable by traffic, and in 1797 the Government called for a replanning competition. After many years of waiting only one architect (the Duke of Bedford's) came forward, and then only because some of the Duke's ground was involved. Ultimately the architect of the office of Crown Lands and the architect of the Department of Land Revenue submitted designs. They were told to produce a plan that should be beautiful and cheap. Nash's plan, which was accepted, provided for a large number of villas in Regent's Park, but these were omitted in the carrying out, and the Department forewent much revenue. Concluding, the speaker said that if architects could sug-



REGENT QUADRANT, WITH THE COLONNADE.

gest improvements on the London Crown Lands Estates, they would be sympathetically considered.

Professor A. E. Richardson, seconding the motion, said that Mr. Summerson, an old pupil of his, had given a remarkable picture of Nash—the last of the Classicists and the first of the Gothicists. Nash "cribbed" in all directions, copied the Palladian elevations of Gibbs and others, and made use of contemporary French plates. He also employed "ghosts," and among these was Pugin, who was commissioned to measure Perpendicular work, which in due course came out in those very good buildings, the Houses of Parliament. Nash also gained a great reputation for the design of mock castles.

Sir Giles Scott said it gave him special pleasure to support the vote of thanks, because Mr. Summerson had been in his office. Nash, continued the President, had been criticised for the superficiality of his architecture, but he wondered whether, had Nash built in Portland stone instead of stucco, it would have had the effect of superficiality.

Mr. W. Ormsby-Gore, First Commissioner of Works, said Nash had a special place in the history of London and of English architecture. He was plagiaristic and derivative, but he gave character to an amorphous city. Stucco was all important in assessing Nash's contribution. Regency work was something to be preserved, and very largely because it was stucco architecture. The speaker wondered how far Bath was responsible for Nash's ideas. The Regent played a great part in the development of those days, and it was through Nash's influence with him that we had that last ebullition of the classical tradition. Nash's old Regent-street had gone, but there was still his Park, and we should preserve what was left of his work.

Major H. C. Corlette paid tribute to the work of Mr. Ormsby-Gore on behalf of architecture. Only recently, he said, the First Commissioner had saved a most important bridge in Cardiganshire by his own effort. The speaker then mentioned two houses at Treforgan which, he said, seemed to show the hand of Nash.

Mr. Martin S. Briggs mentioned that a new book on Nash, by Mr. Summerson, would be published shortly.

Mr. John Murray said that he was the villain who had had to destroy Nash's work in Regent-street. It was his misfortune, and he could only apologise. He regarded Nash as a great architect, and had always admired his work. The speaker then produced a volume of photographs of old Regent-street, taken in 1910, and these were afterwards available to members of the audience for inspection.

Mr. W. H. Ansell, apropos of town planning, said that after reading Professor Lanciani recently, he had come to the conclusion that Nero was an enlightened town planner. Nero wished to replan Rome, but the difficulties were so great that he took a shorter way and arranged the fire, and with his own hand supplied the appropriate musical accompaniment. It seemed that "fiddling while Rome burned" was not to be regarded as a reproach, but rather applauded as the effort of an enlightened town planner.

Lord Gerald Wellesley said that Blaise Castle was mentioned in Jane Austen's "Northanger Abbey," and one would conclude that it was a mediæval castle. In reality, the paint was then hardly dry upon it. He thought that very few people who read "Northanger Abbey" ever realised that.

Other speakers having joined in the discussion,

Mr. Summerson, replying to points raised, said that Nash built in stucco because he could not get Bath stone. Nash knew Bath, and he (the speaker) thought he mentioned it in one of his reports on Regent-street. He (the speaker) knew the houses at Treforgan mentioned by Major Corlette, but thought they were not by Nash; the evidence seemed to be all against it.

"THE BUILDER" DEBATE

LXXXI.—*That criticism of buildings in the Technical Press is to the good of the architects and architecture.*

SIR,—This proposition is timely in view of official efforts to put architecture "on the map." A number of excellent and forceful speeches—notably those of the Prince of Wales and Sir Giles Gilbert Scott at the R.I.B.A. centenary banquet—have implied that the architect is more than a creator of buildings, that he is a man of destiny, the arch-planner, in fact.

No one will wish to deny the potential uth of these statements—least of all the architects. Yet the profession will, I think, admit that not every architect *ipso facto* is a really competent planner, and as such there is a danger of the public ascribing high powers of planning to any man calling himself architect. A sufficiency only is required of errors due to non-competence or complacency to shake the confidence of the public.

It would be a thousand pities if this were to come about, and the question arises: How may non-competence and complacency be guarded against? I suggest that architectural education and registration will eventually take care of the first, and that a greater licence for free criticism of architects' buildings and competition designs will cure the second.

In late years there has been a growing tendency to muzzle opinion, as is shown by the number of trumpery actions for libel and slander which come before the courts. Something of this caution in expression has spread to the architectural profession, for while architects profess themselves in favour of free criticism of buildings, it is very seldom that an architectural paper contains any criticism of a building in which attention is directed to an error of taste or judgment. Why should this be so? Painters, sculptors, authors, musicians, actors and playwrights have each and all to submit to the acid test of printed criticism. Why should only the architect—whose artistic essays intrude themselves, for good or bad, upon the public attention—be exempt?

Most architects would reply that the reason is that a building is capable of criticism from two angles—art and utility. A building may offend against every canon of taste and yet function admirably. Criticism against the artistic element may, it is argued, be construed as an attack against the planning and constructional skill of an architect. And yet, be it noted, architects are the first to condemn the lack of design in houses put up by speculative builders, whose houses, for the most part, function well and "fill the bill" for which they are intended. But when it comes to any suggestions of criticism of his own building, the architect becomes very wary: "Criticise by all means," he will say, "but let your criticism be favourable." As a result, architectural criticism becomes nothing else than a meaningless cipher, from which every constructively critical remark is ruthlessly struck out.

I postulate, sir, that it is time that this state of affairs came to an end, and that every architect who erects a building should invite from reputable newspapers frank criticism. I use the word "reputable" with intention, as indicating that the paper's critic be fair-minded and informed. As a corollary, I suggest that when such an invitation has been issued, the architect should not be entitled to object legally, unless misstatement of fact or malevolent intent on the part of the reviewer could be shown.

The value of unfettered opinion and frank criticism must be clear. The result would be that the good architect would receive praise and the poor architect his due. A higher standard of design would result, and, I think it is clear, architecture would very speedily benefit. It would, of course, be open to any architect to decline to invite criticism; in which case the public would naturally place their own interpretation on the merits of the building.

POSITIVE.

SIR,—Theoretically, "Positive's" suggestion would appear to be a perfectly reasonable one, but there are many difficulties that, in my view, prevent its being put into effect. "Positive" rightly points out that "painters, authors, musicians, actors, and playwrights" have to submit to criticism, but I suggest that the case of the architect is by no means "on all fours." The work of all the artists mentioned is capable of being affected by criticism. The picture and the book may be ignored, or if purchased and not approved, destroyed; the concert and the play need not be attended. But the work of the architect remains, and no amount of criticism can remove it.

Moreover, many factors of practical necessity have gone to its creation—inapplicable in any sense to the other arts—questions of construction, site, light and air, rights of adjoining owners, height restrictions, town planning, zoning and building regulations, requirements of the client, cost, and so forth, all of which may materially affect the design of a building, and with all of which a critic would have to be familiar if he were to do no injustice to a building or its architect. It is not fair, or indeed possible, to criticise the architect as one would criticise practitioners in the other arts.

A further point, and one of greater seriousness, is—What right has the independent onlooker to criticise buildings? Presumably the building owner knows what he wants and sees that he gets it. What the outside critic may think of the building when it is erected is of little use to him; it is too late.

I am glad to note "Positive's" qualification that there must be an invitation to criticise. That is a most important point. But I wonder how often the invitation would be forthcoming. My experience has been that when architects clamour for criticism of architecture they mean criticism of the work of other men—not of their own. Criticism of current buildings has been attempted in the past in the popular Press, but to my certain knowledge it has often given no satisfaction to the architects concerned—indeed, has caused them and their clients annoyance and brought trouble to the newspaper proprietors themselves.

In my view it would be fatal for the responsible technical Press to adopt criticism as a consistent policy. What, after all, is the purpose of publicity in the technical Press from the architect's point of view? Presumably, to get his work known and appreciated. Some architects may even hope that such publicity may be the means of securing further commissions. Adverse criticism would not be likely to help the realisation of that hope—might, indeed, lead to an action at law if the architect affected could prove professional damage from such criticism.

I hold, moreover, that criticism of executed work in a responsible technical journal is not necessary, since its readers are themselves competent to judge a building from the plans and other illustrations and the description given. I agree with "Positive," however, that criticism of competition designs is admissible, for at the paper stage no great harm can be done; indeed, a reasoned criticism of designs by a competent person may be definitely helpful to many of the competitors, though it is rarely appreciated even when not resented. It should, however, in my opinion, be signed.

I hold, therefore, that criticism of the executed work of living architects is undesirable, particularly at a time like the present, when the arts, especially architecture, are in the melting pot, and the views of no two persons, however competent to judge, appear to be alike. The only hope for the improvement of architecture is in the education of the more enlightened section of the public, a better knowledge of architectural art by public authorities, and the education of architects themselves. No amount of Press criticism of individual buildings will prevent the erection of bad work.

NEGATIVE.

WEST COUNTRY TOWNS, II—TETBURY

By FRANK BENNETT, A.R.I.B.A.

TETBURY, Gloucestershire, is a town of naturally beautiful disposition. It stands aloof on a little plateau with a valley encircling it on three sides. Buildings group themselves closely around a small, low-roofed "market," and a tall church, standing on the edge of the plateau, looks down upon them. The town seems busy and friendly, and gives the impression of being an established centre and not merely one on the high road to be passed through rapidly.

The "Market," an old building standing on piers, is not a specially exciting piece of architecture, but its age, more than its location, gives distinction and contrast to the surrounding buildings of later date. Age and youth are complementary to one another, and it is the absence of an old building such as this one which makes many London suburbs unsatisfying.

The leisurely, sophisticated character of this fine old English town is emphasised further by a number of old houses which stand out on columns over the pavement. They tell again of old age, of streets once much narrower and of uncomfortable congestion.

The inhabitants of Tetbury earn their living mostly from agriculture, and their lives have not been affected much yet by industrial expansion. Motor traffic is the impending menace. If it increases, as it is likely to do, it may disturb the order and peacefulness of the town. The creation of a system of by-passes is under consideration, but this may take a long time to materialise.

Telegraph wires have not improved the beauty of Tetbury. They are slung in thick bunches across the centre of the town, and, while no doubt they serve the very best of purposes, it seems that no regard whatever is paid to the offence their ugliness might give. Apparently it is quite out of the question in country districts to run wires underground.

Two photographs show old and new houses in Tetbury. The old ones, like those in Burford—or, for that matter, like those in the centre of London—are packed closely together. They look like town houses and their sophistication is charming. The new houses, which are disposed to accord with present-day regulations, stand back from the road. The line of them is divided into little sections, and here and there, projecting forward, is a wing to "break up the monotony." These houses are of a different class from the others, the old ones, but they belong to the same town, and it seems unfortunate, for this reason, that they cannot conform to the existing character of the town. Actually, the new houses are a ribbon development trailing out of the town on a high road.

The good squarish front gardens to these houses are pleasing, and the open fences allow passers-by to enjoy a view of the flowers, but the coat-and-skirt walls are a design quite foreign to the town. Tile hanging can look well in its right district—in Kent, for example—but in Tetbury weather-boarding would have looked better. The road in front, some 100 yards long, is rather bare, but no trees have been planted as a foil to its insisting horizontality, and the telegraph-poles are unfortunate. The skyline of these houses brings up a thought on the chimney-pot problem. The law says that chimney-stacks shall project a minimum of 2 ft. above the tops of roofs. This, apparently, is not

THE TOWN HALL, TETBURY.

enough height to prevent down-draughts, and the condition has caused a great rabble of chimney-pots to spring up all over the country. The speculating builder, usually driven by the stress of economy, supplies the minimum, and leaves the owners of the houses to add any chimney-pots they please and for which they care to pay. At present, the only cure seems to be either to "face up" to the extra expenditure at the start, and to heighten the stacks (on the Elizabethan principle), or at least to standardise the design and height of the chimney-pots.

The town officials say that, at present, no control is exercised over new building with a view to street widening or to the preservation of the natural beauties of the town. The boundary of the urban area has been widened to embrace recent and anticipated extension. It is difficult, they say, to build new workers' houses except along the main roads where the services already exist. New roads cost around fifteen shillings a square yard, or £4 a yard run without side-walks. No new workers' houses are being built, because they would not serve their purpose. A workman cannot pay the ten shillings a week rent. Timber houses might be an economy in first cost, but not in the long run; brick houses last longer. Perhaps this trouble of high rents is caused by a false ideal about workmen's homes. When a workman lives on the edge of the country, does he need a hall, a bathroom with running water and indoor sanitation? These items send up the rent.

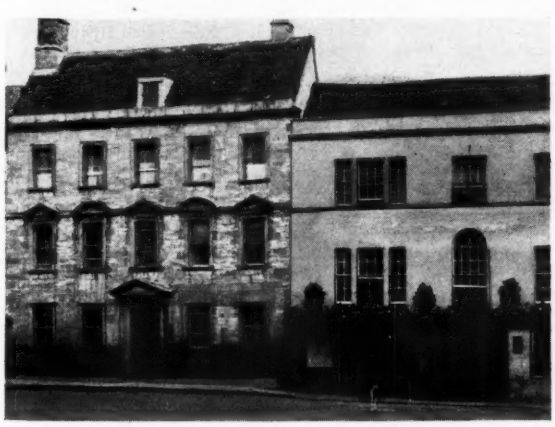
An interesting point on the limitations of town growth was explained to me. While new houses are built at the back of the town, the valley prevents any expansion to the front of it because services cannot be carried across the valley. This means that the church and the other buildings on the edge of the plateau will always enjoy there the fine open prospect over the valley. No modern development can destroy this amenity, whatever may happen to the others in the course of time.

(To be continued.)

A BAROMETER OF TRADE

Speaking recently in the House of Commons, the Minister of Health said that employment in the building trade did not depend wholly, or even mainly, on the building of houses. The total volume depended on the general prosperity and confidence of the nation. The Government need not be afraid of accepting that barometer. At the end of July, 1934, the number of people employed in the building trade was 696,000, and in the preceding year it was 626,000, and in the year before 549,000. The barometer thus showed a satisfactory rise. The number of unemployed in the building trade had between the end of July, 1933, and the end of July, 1934, fallen from 152,000 to 125,000. Returning prosperity and returning confidence were bringing renewed employment to the building trade.

The work of slum clearance had reached such a degree of organisation and advancement that it was now possible to proceed to the second stage, overcrowding. The one was complementary to the other; the evils of the one were as great as the evils of the other. In individual cases the evil of overcrowding might be less than the evil of the slum house, but he doubted. Overcrowding produced effects which were as deplorable socially as those of slum conditions. Quantitatively, it was a greater evil. There was more of it in the country. In both stages the Government would be guided by the same principle—that slums and overcrowding were evils which could no longer be tolerated in the country; the Government would do whatever was necessary, knowing that behind them was the good will of the whole country.



OLD HOUSES IN THE CENTRE OF THE TOWN.

A NEW EXTENSION OF TETBURY

INTERNATIONAL ARCHITECTURE, 1924-34

THE Centenary Exhibition of the R.I.B.A. was opened by H.R.H. The Princess Royal, Countess of Harewood, on Friday, November 30. Her Royal Highness, who was accompanied by Lord Harewood and Miss Yorke, Lady-in-Waiting, was received at the door by the President, Sir Giles Gilbert Scott, R.A., and Mr. H. S. Goodhart-Rendel, Vice-President and chairman of the Exhibition Committee.

The President presented to Her Royal Highness Lady Scott, from whom she received a bouquet; Mr. G. Grey Wornum, architect of the R.I.B.A. building; Sir Ian MacAlister, secretary; and the hon. secretaries of the Exhibition Committee, Mr. L. H. Bucknell, Mr. R. A. Duncan, Mr. E. Maxwell Fry and Mr. M. L. Anderson. The party then proceeded to the Henry Florence Hall.

The president, introducing H.R.H. The Princess Royal, said they were grateful for that further instance of the interest taken in architecture by the Royal Family. The exhibition was not only for those who were professionally interested in architecture, but also and mainly for the general public. Its aim was to develop the growing interest of the public in architecture and to bring architecture more into the life of the average man and to emphasise its sociological value in the national life.

Her Royal Highness the Princess Royal then declared the Exhibition open.

Mr. H. S. Goodhart-Rendel said that of late years their chief exhibitions had been travelling shows "tried out" in London and afterwards sent on tour in the provinces, and sometimes even in the Dominions as well. In Conduit-street the attendance had not always been all they could desire, the exhibitions having to wait until they got on the road for their popularity; on tour their popularity had been enormous. They very much hoped, therefore, that in those new surroundings they might be able to ensure that popularity began at home. The exhibition was designed as a whole, the exhibits being selected not with the idea of giving particular examples of the work of any individual architect, but rather in order to display general tendencies. Many admirable buildings had therefore been excluded because there were already many of the same kind; other buildings, perhaps not quite so admirable, owed their inclusion to the fact that they represented types which could not be passed over. The construction of each section—for they regarded each section as a thing that had been constructed—had been done by a member of the committee expressly elected for that purpose. By that means, possibly, they might have given some play to personal idiosyncrasy, but they had ensured the compactness and consistency of the whole exhibition. English architecture was not the architecture of the forum or the palace, but, above all, the architecture of the workshop and the home. He believed that tendency would be plainly apparent in the English section of the exhibition.

REVIEW OF THE EXHIBITS.

This exhibition is by far the largest display of architecture ever held in this country, and includes photographs, models, aerial photographs and picture-statistics numbering over 1,000 exhibits, received from nearly every European country, the Dominions and from the United States of America. The various sections cover: The Idea of Planning; Planning the Dwelling; Planning for Industry and Commerce; Architecture of Transport; Architecture of Pleasure; Planning for Health; Architecture of Public Buildings; Ecclesiastical Architecture; and What the Architect Does.

In the exhibition, which embraces a period of ten years, 1924-1934, one is able to study with accuracy the trend of architectural design both here and abroad, of the many types of buildings, both large and small, in their respective sections. The change in the design of the buildings is remarkable both in regard to planning and elevational treatment. The latter particularly commands attention by its suddenness in comparison with the gradual changes and breaks of fashions which have taken place before the period covered by these photographs. It may be said that a new style of architecture has been evolved as shown by most of the exhibits, possessing but the barest bones, if any at all, of tradition. This new style has probably been brought about in a measure by two factors—cost and new materials, though we must not forget the influence of Continental developments. The use of new materials has enabled difficulties to be overcome which were almost insurmountable a few years ago. The huge blocks of city and town flats, of which many photographs are shown, indicate the inclination of people to reside in the towns, and, by so doing, to avoid overcrowded train services and escape the congested suburbs where large areas of land are being cut up for small houses. These large blocks of flats are townships in themselves, and possess every convenience.

The extensiveness of the exhibition precludes anything but a general impression being given. The general planning of the various types of buildings reaches a high level and is the outcome of much study, thought and experience. The elevational treatment generally strikes one by its starkness, and only in a few instances can it be called beautiful. This characteristic bareness appears to prevail in nearly every type of building. At completion they have a freshness, but in a few years drabness and monotony, brought about by atmospheric conditions, not infrequently prevail.

In the housing section some good examples are to be seen, such as No. 5, Yaffle Hill, Broadstone, Dorset, by Mr. Edward Maufe, a pleasing composition on modern lines. A house of this character, when the gardens are mature, is bound to grow more attractive as time goes on. No. 9-10, Kirby House, Yorkshire, is a good modern type in a fine setting. No. 8, "Broadlands," Ascot, Berkshire, is another pleasingly designed house.

Of the many smaller modern houses on view, however skilful their planning, their exteriors have a hospital-like character, which would not, we should say, have the inspiring and home-like character of our old brick houses, though it must not be forgotten that if the client demands the architect must produce.

The aerodromes are first-class examples; their treatment suggesting their purpose—modern buildings for modern inventions. Of churches, some fine designs are to be seen, and we admire the originality, dignity and ecclesiastical character of Mr. Maufe's churches; they possess traditional character, yet show a transitional note and the modern spirit. We refer to No. 1139-42, St. Thomas's Church, Hanwell, and St. Saviour's, Acton. No. 1116-8, St. Saviour's Church, Eltham (R.I.B.A. Medal Award) is ably shown by photographs, and a beautiful model by F. Norman James. Sir Giles Scott's Liverpool Cathedral (the chancel) is vastly impressive.

One of the most striking exhibits is the Mersey Tunnel (No. 214), and others, designed by Mr. H. J. Rowse. There is a bigness and impressiveness in the handling of this great scheme which cannot fail to impress the multitude and compel the admiration of his professional brethren; a big scheme treated in a big way, the brickwork being a credit to our bricklayers. A similar tribute applies to the Battersea Power Station, the elevations of which were designed by Sir Giles G. Scott. Its character testifies power, and its striking skyline is now a feature of London.

The railway stations shown by Messrs. Adams, Holden and Pearson are simple and pleasing in character, and admirable for their purpose. Cinemas are well represented by many excellent examples by architects who specialise in this class of work. Illustrations of public-houses, of which there are many to be seen, show the vast improvements made recently. As for road houses, that at Cheddar Gorge, No. 461 (Messrs. Russell, Page and G. A. Jellicoe), is a really good example on modern lines, conspicuous by its modesty and unobtrusiveness. Morecambe Hotel, by Mr. Oliver Hill, No. 468, is one of the best of our modern hotels. Flats are shown by many eminent architects—Sir Giles Scott's Cropthorne-court (No. 46) has a more English character than some of the others. Trowbridge-street, Liverpool, housing scheme (No. 53), by Mr. L. H. Keay, Director of Housing, Liverpool, contains no less than 316 balconied flats.

The models in evidence show much skill in their execution. The most outstanding is that by Mr. Harold Ridge, A.R.S.M., which shows theatrical lighting effects and colour combinations, both harmonious and contrasting, worked by switches—a wonderful effort.

In the Public Buildings Section, many recently completed schemes for county hall and municipal buildings—mostly won by their authors in competition—form an attractive group. No. 603, Southampton Civic Centre (Mr. E. Berry Webber), is a fine group, as is also No. 610, Peterborough Town Tall (again by Mr. Webber). No. 611, Worthing Town Hall, by Mr. C. Cowles Vowsey, is consistently good throughout. In post offices and telephone exchanges, etc., the official architects of the Office of Works hold their own with private practitioners. No. 613, Post Office, Neath (by Mr. A. Bullock); Bishopsgate Telephone Exchange, London, No. 616 (by Mr. J. H. Markham); No. 626, Duveen Extenscion National Portrait Gallery (Mr. J. G. West) should be noted. Notable photographs of New Delhi are contributed by Sir Herbert Baker and by Sir Edwin Lutyens. Sir Herbert also has sent views of the Government Buildings, Pretoria. Views of Surrey County Hall extension and Manchester Reference Library represent Mr. E. Vincent Harris. Foreign architects contribute many interesting schemes.

CONTROL OF HOUSE DESIGN

Mr. S. L. G. Beaufoy, A.R.I.B.A., a Ministry of Health inspector, heard at Haywards Heath, on December 4, an appeal by Messrs. Tecton, architects, of 57, Haymarket, London, S.W.1, against the refusal of the Cuckfield Urban District Council to grant permission for the development of land situated to the west of Wood Ride, Haywards Heath.

Mr. A. Chitty, who appeared on behalf of the appellants, referred to the clause in the Town and Country Planning Act enabling local authorities to provide for the preservation of local amenities by control of the design and external appearance of buildings. In a number of localities the authorities had made use of their powers of veto, and the use they had made of them was, he said, perhaps the most disturbing symptom of the present unsatisfactory nature of architectural control. The clause had been used, it was submitted, and continued with increased frequency to be used, to obstruct the progress of rational, responsible architectural design. It seemed to be becoming more and more the practice for local authorities to set themselves up as dictators of architectural taste, invariably in opposition to progressive design, and incidentally encouraging the speculative builder to persist in his architectless "period" villas.

Mr. Tatton Brown, a witness called by the appellants, said they were driven to the conclusion that the council were not really interested in the merits of their designs, and were pursuing a purely negative and obstructive policy.

Mr. F. Brumell, clerk to the council, said that the report from the Advisory Panel of Architects recommended that the erection of the houses should be approved, subject to certain modifications. The council decided not to grant an interim development permit because the elevations and general character of design were unsuitable for the district.

There were no witnesses for the Council, and the inspector closed the inquiry.—*The Times.*

From the R.I.B.A. Exhibition of International Architecture.

ST. THOMAS'S CHURCH, HANWELL.

Mr. EDWARD MAUFE, F.R.I.B.A., Architect.

(See page 974.)

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From the R.I.B.A. Exhibition of International Architecture.

A HOUSE NEAR ASCOT, BERKSHIRE.

MESSRS. PAKINGTON AND ENTHOVEN, FF.R.I.B.A., Architects.

(See page 974.)

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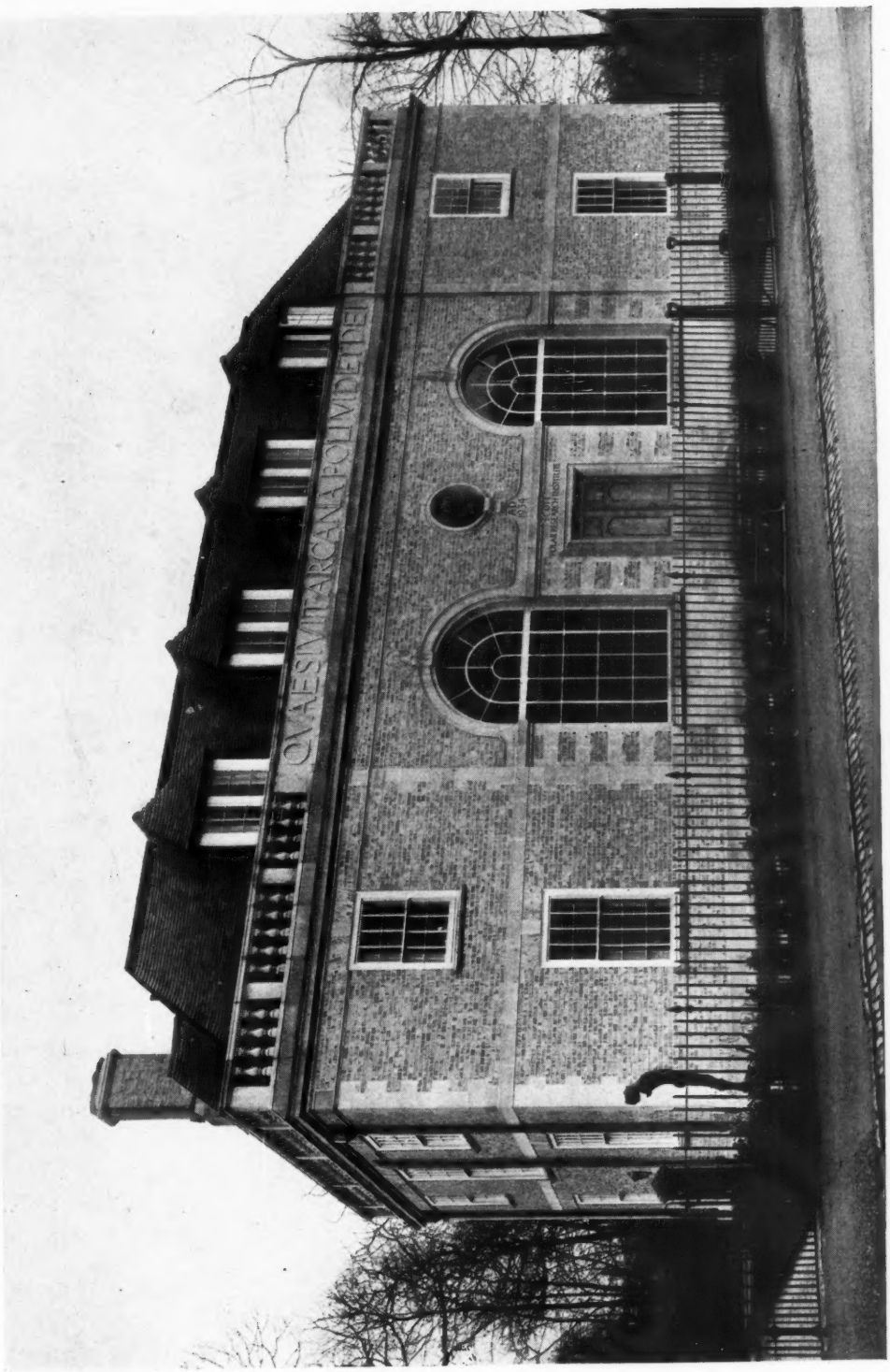
UNIVERSITY OF ILLINOIS



THE SCOTT POLAR RESEARCH INSTITUTE, CAMBRIDGE.
SIR HERBERT BAKER, R.A., AND MR. A. T. SCOTT, F.R.I.B.A., Architects.
(See page 988.)

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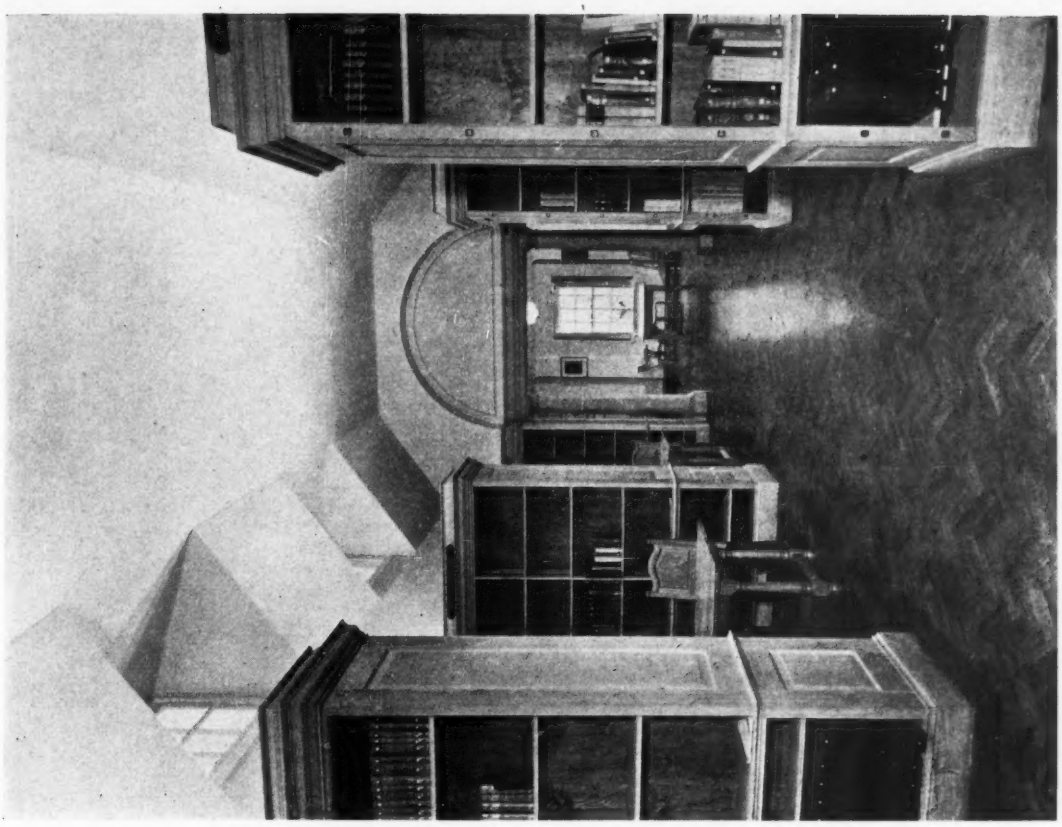

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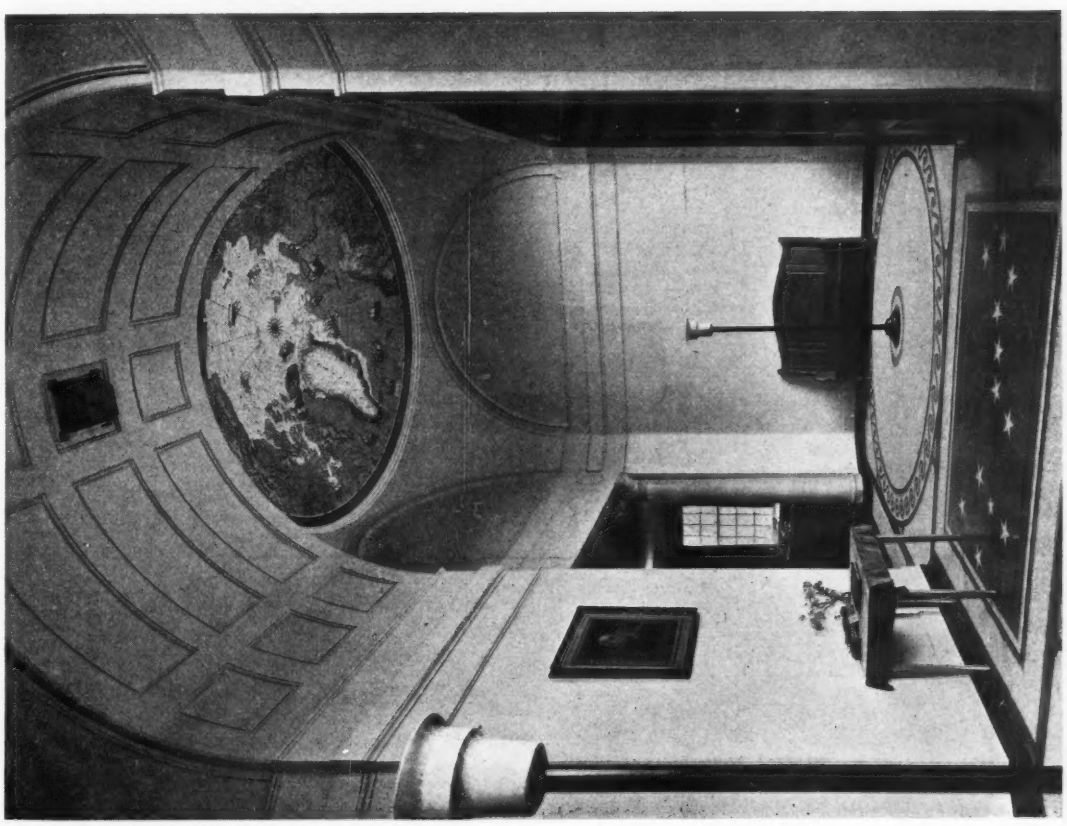
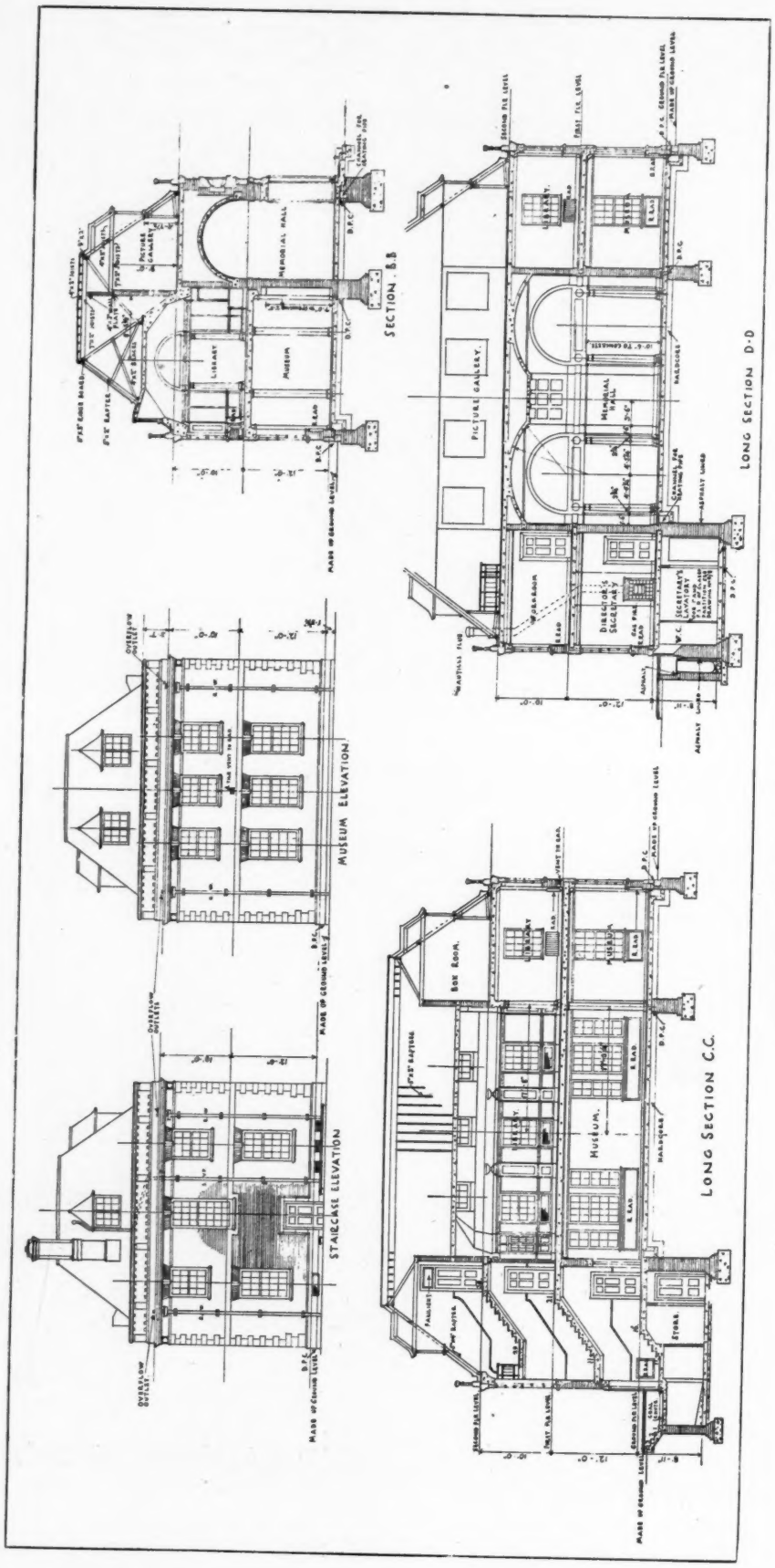


THE MEMORIAL HALL.

THE SCOTT POLAR RESEARCH INSTITUTE, CAMBRIDGE.

SIR HERBERT BAKER, R.A., AND MR. A. T. SCOTT, F.R.I.B.A., Architects.

(See page 988.)



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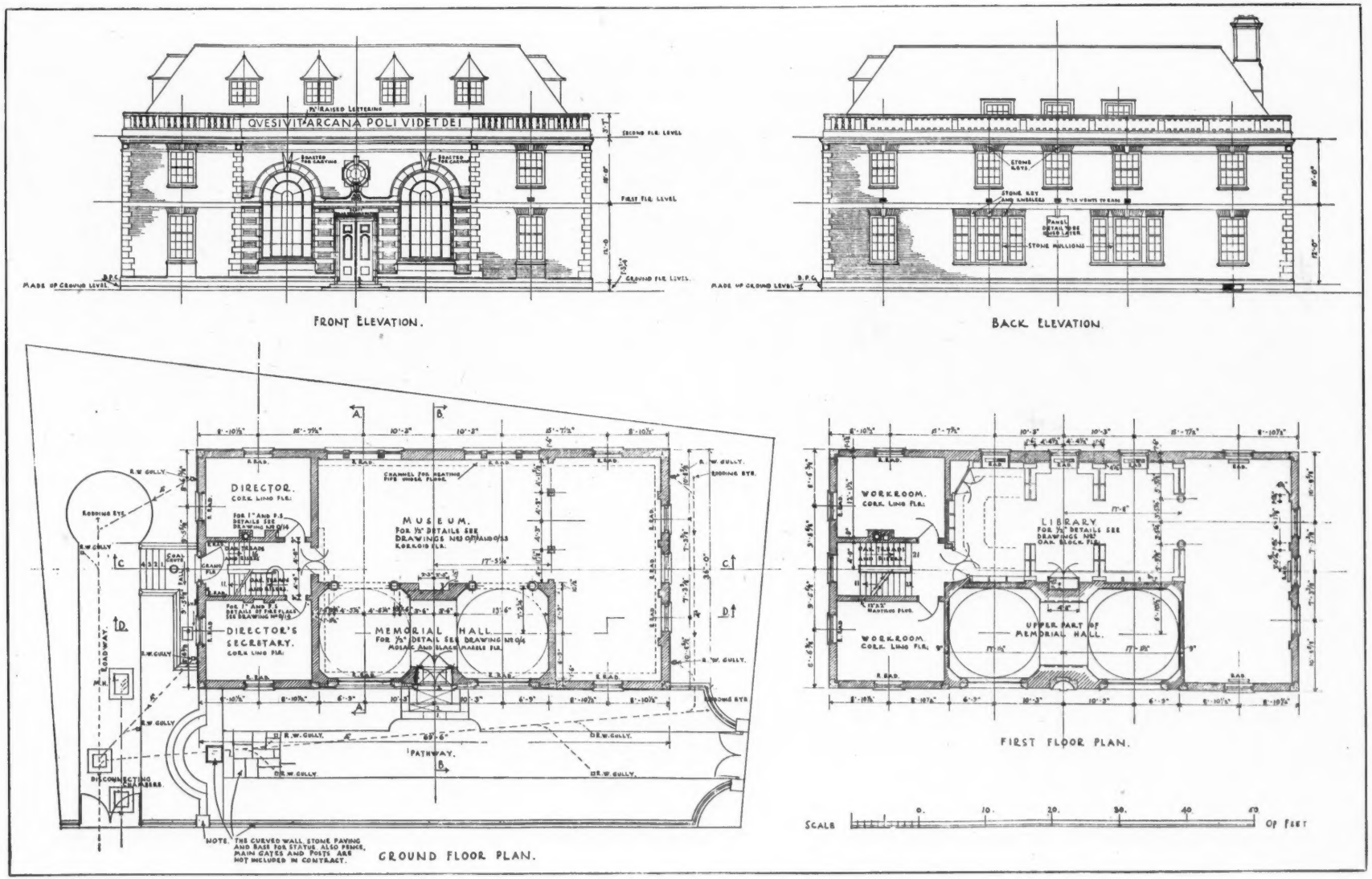

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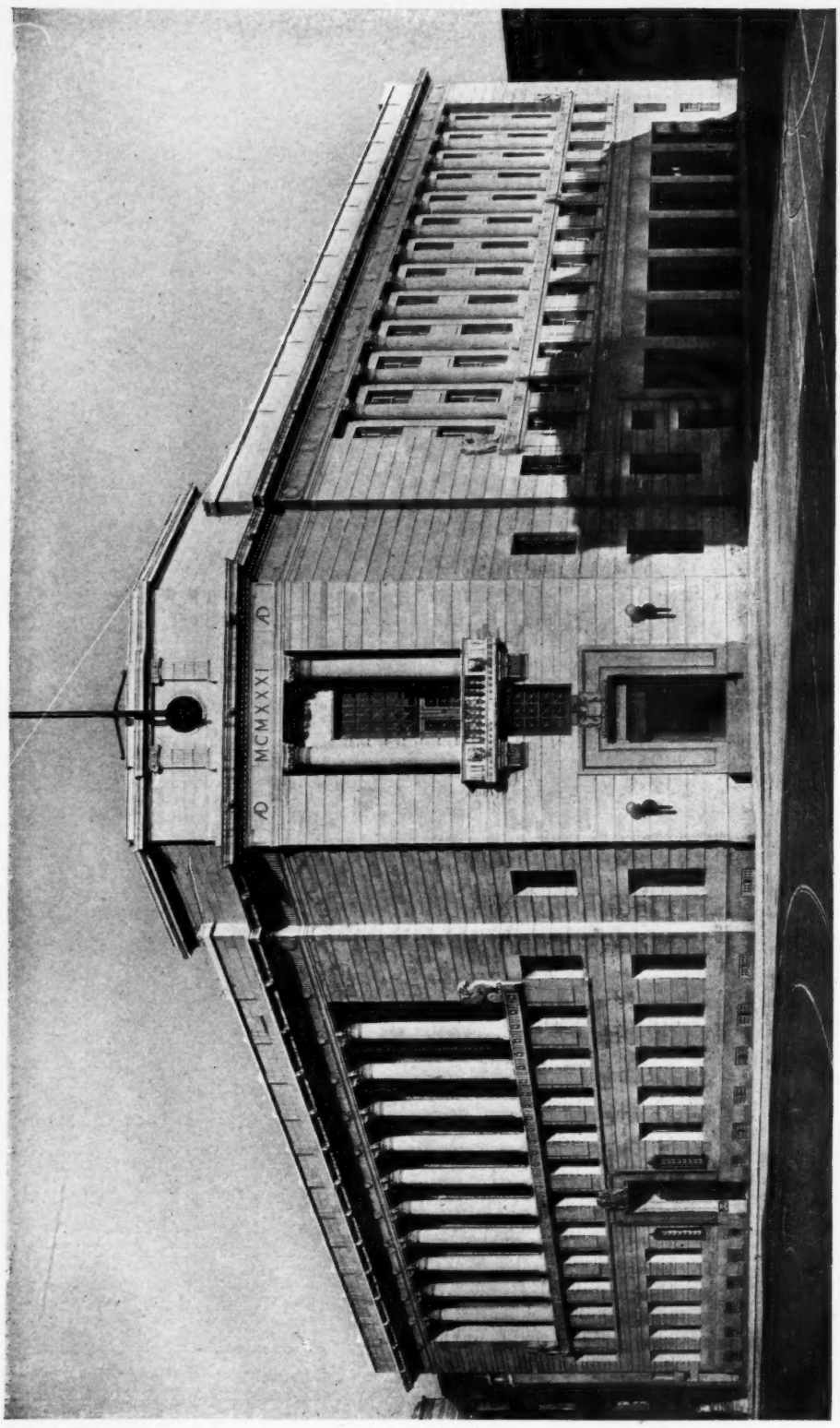
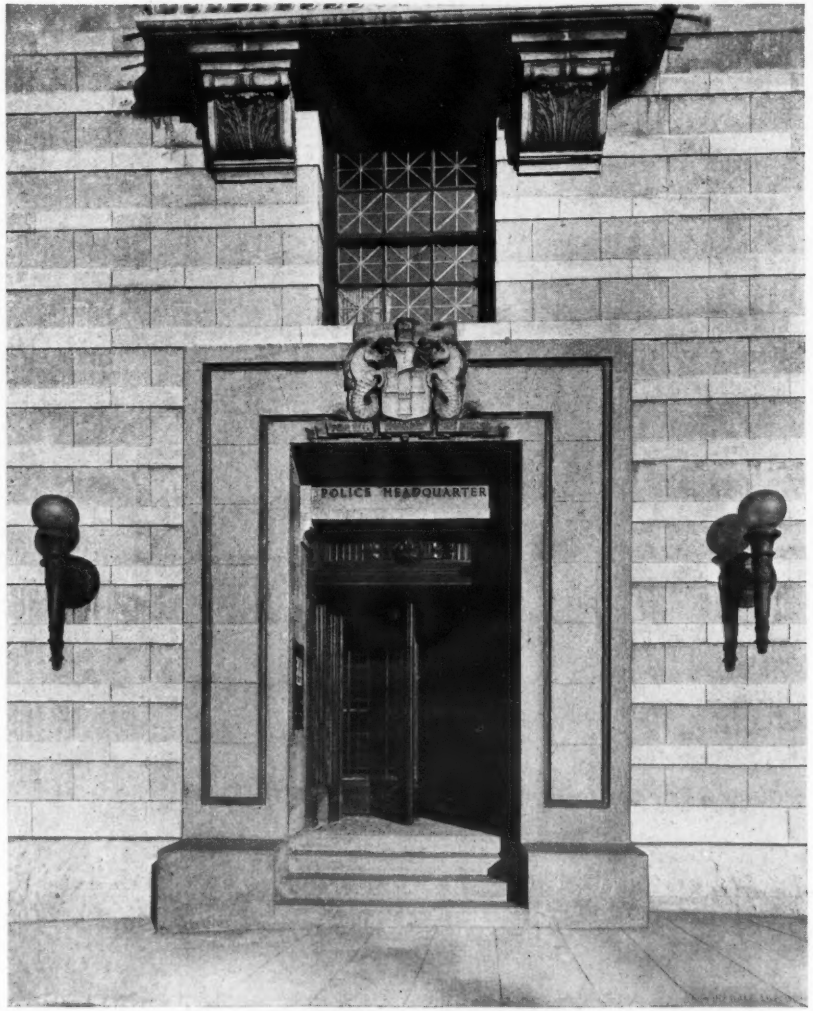


POLICE HEADQUARTERS, COURTS AND FIRE STATION, NEWCASTLE-UPON-TYNE.

MESSRS. CACKETT, BURNS DICK AND MACKELLAR, F. AND A.R.I.B.A., Architects.

(See page 988.)



HEADQUARTERS ENTRANCE.

COURT ENTRANCE.

POLICE HEADQUARTERS, COURTS AND FIRE STATION, NEWCASTLE-UPON-TYNE.

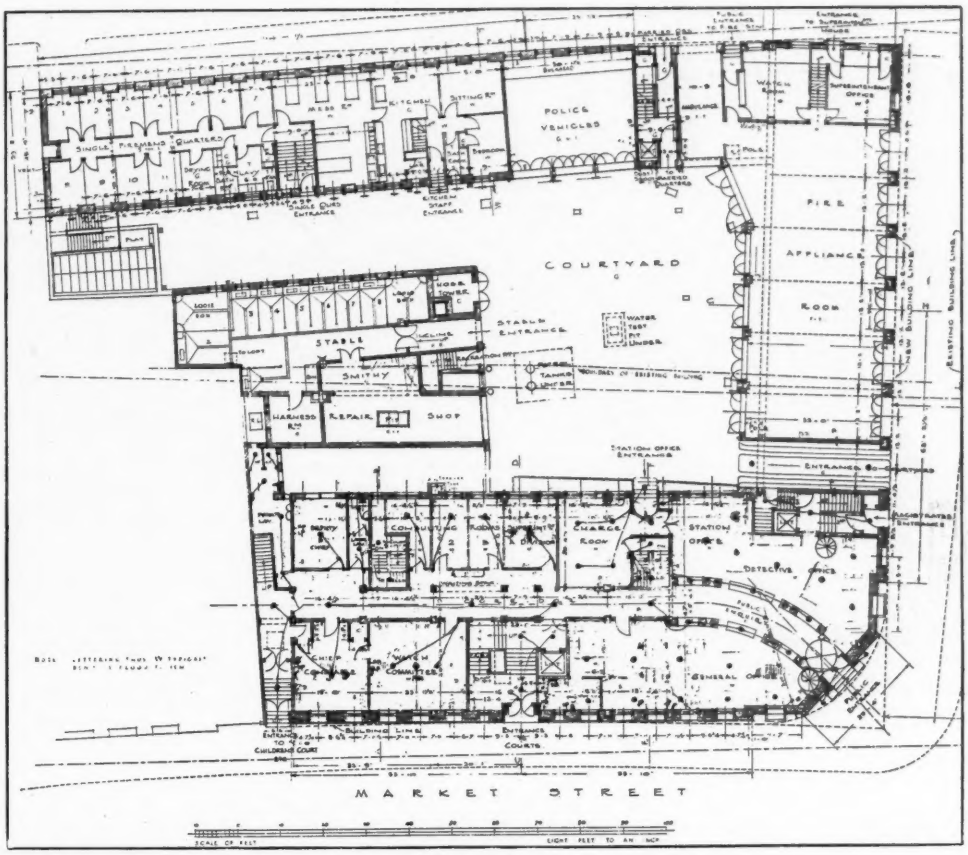
MESSRS. CACKETT, BURNS DICK AND MACKELLAR, F. AND A.R.I.B.A., Architects.

(See page 988.)

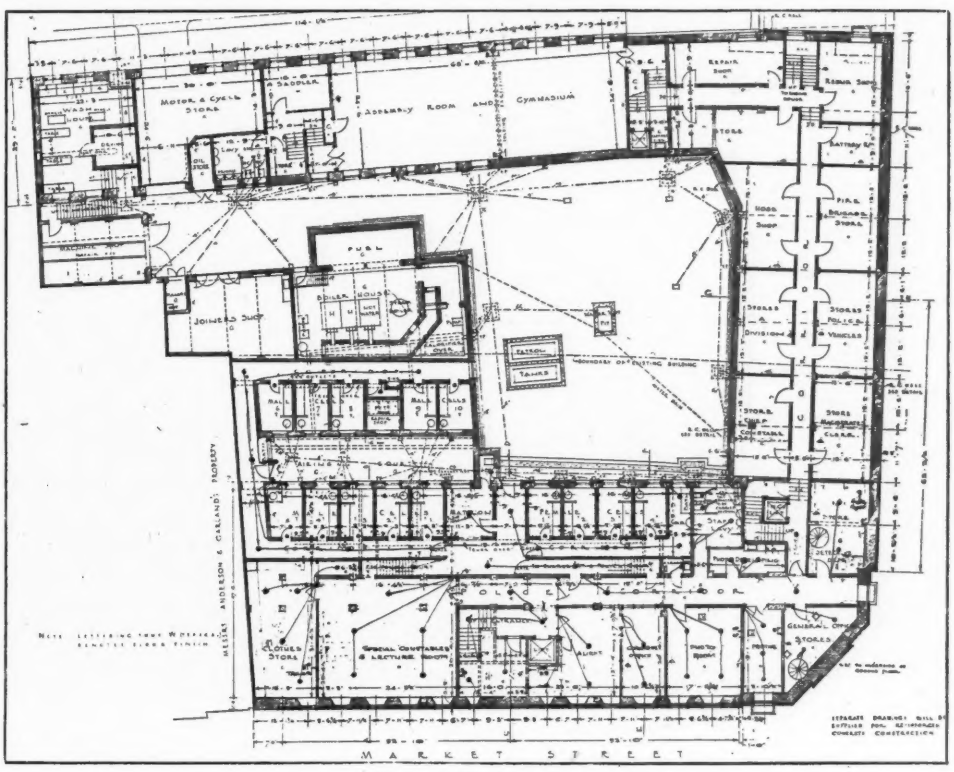
POLICE HEADQUARTERS, COURTS AND FIRE STATION, NEWCASTLE-UPON-TYNE: Court No. 1, Police Station.

MESSRS. CACKETT, BURNS DICK AND MACKELLAR, F. AND A.R.I.B.A., Architects.

(See page 988.)



GROUND-FLOOR PLAN.



LOWER GROUND-FLOOR PLAN.

POLICE HEADQUARTERS, COURTS AND FIRE STATION, NEWCASTLE-UPON-TYNE.

MESSRS. CACKETT, BURNS DICK AND MACKELLAR, F. AND A.R.I.B.A., Architects.

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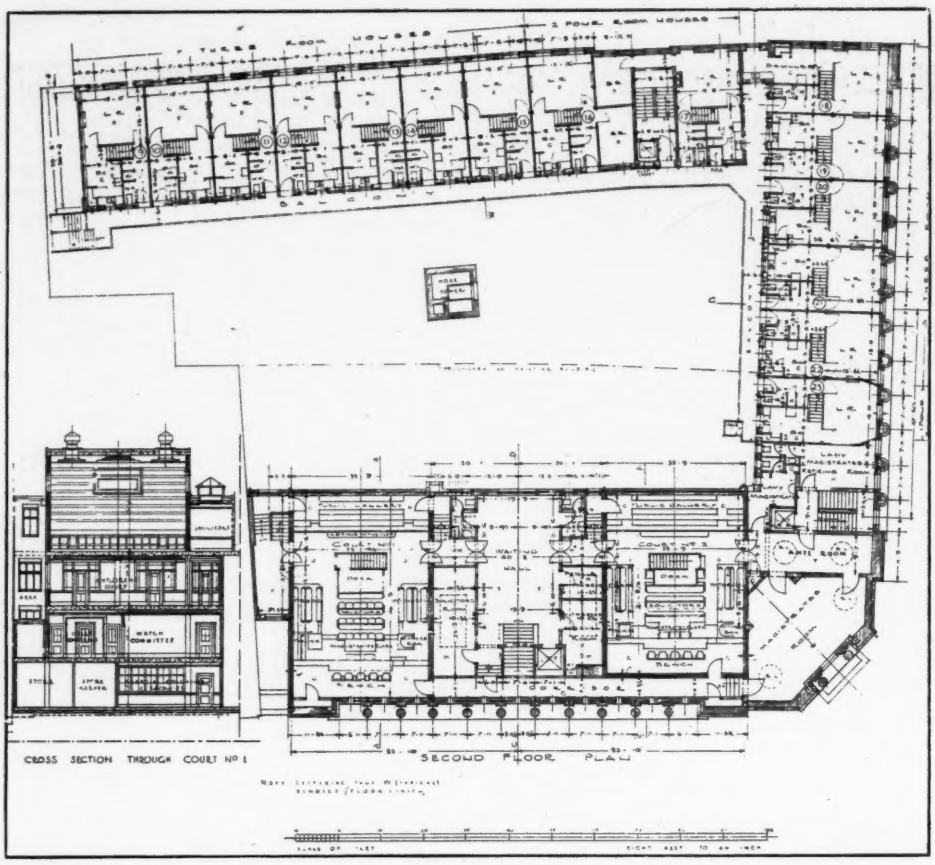

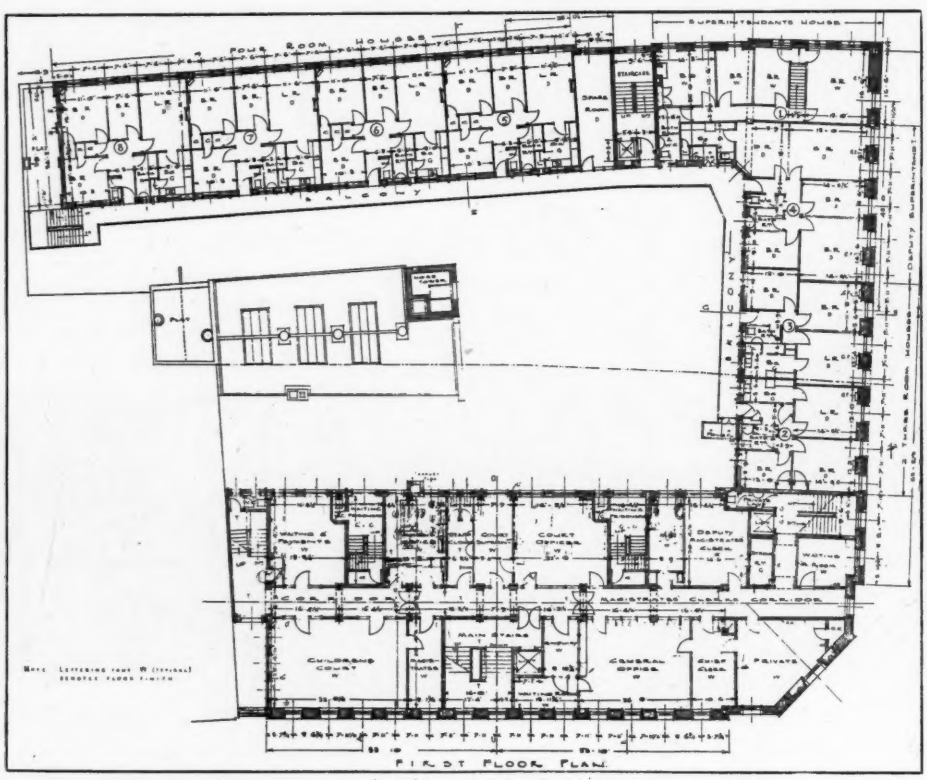

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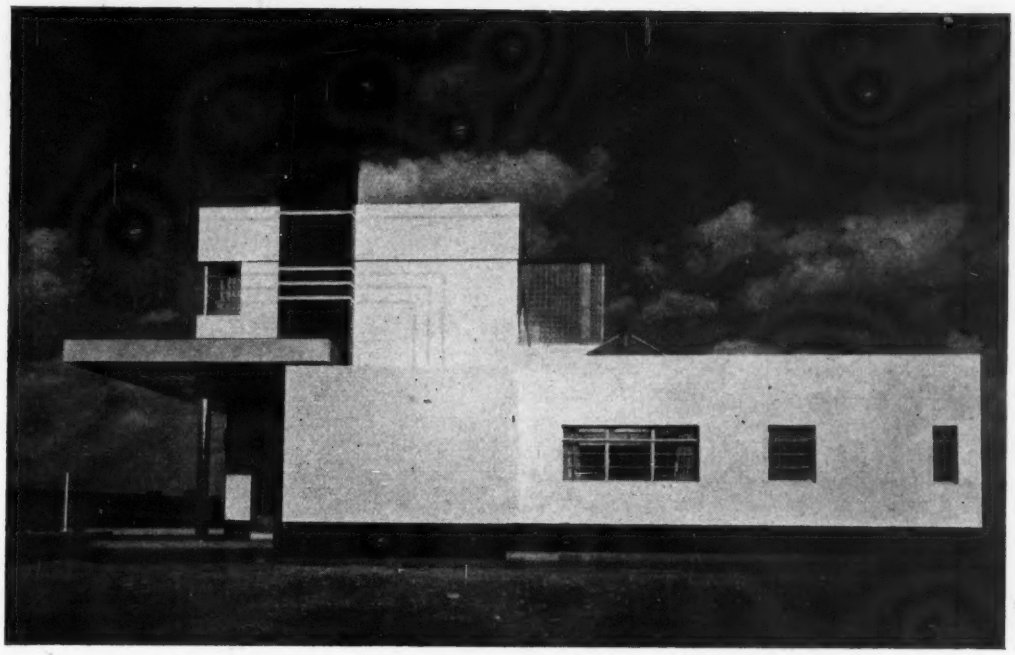


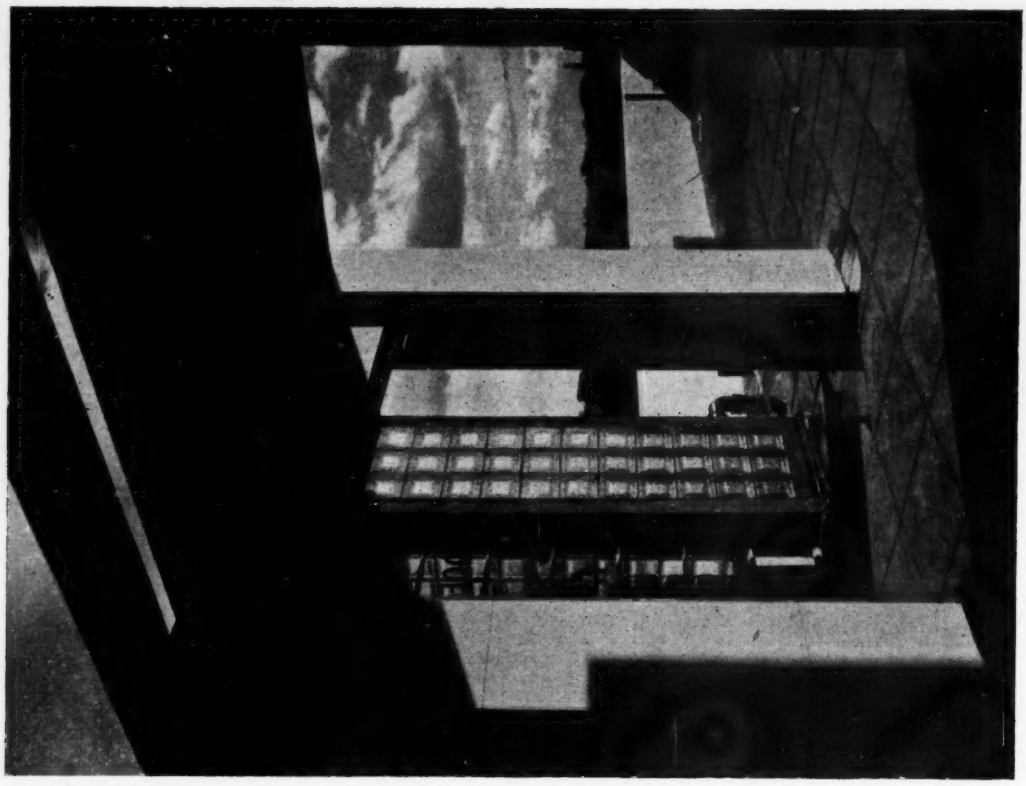
SIDE ELEVATION.

FRONT ELEVATION.

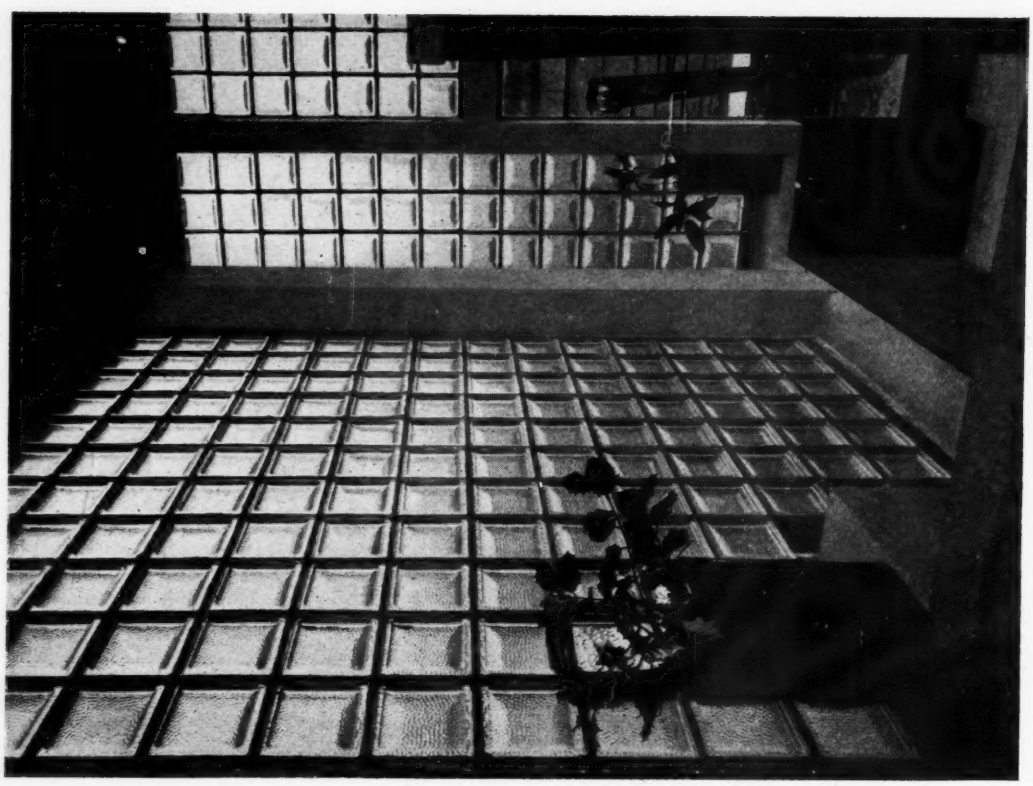
THE KIRK SANDALL HOTEL, DONCASTER.

MESSRS. T. H. JOHNSON AND SON, F. and A.R.I.B.A., Architects.

(See page 989.)



ROOF EXIT.

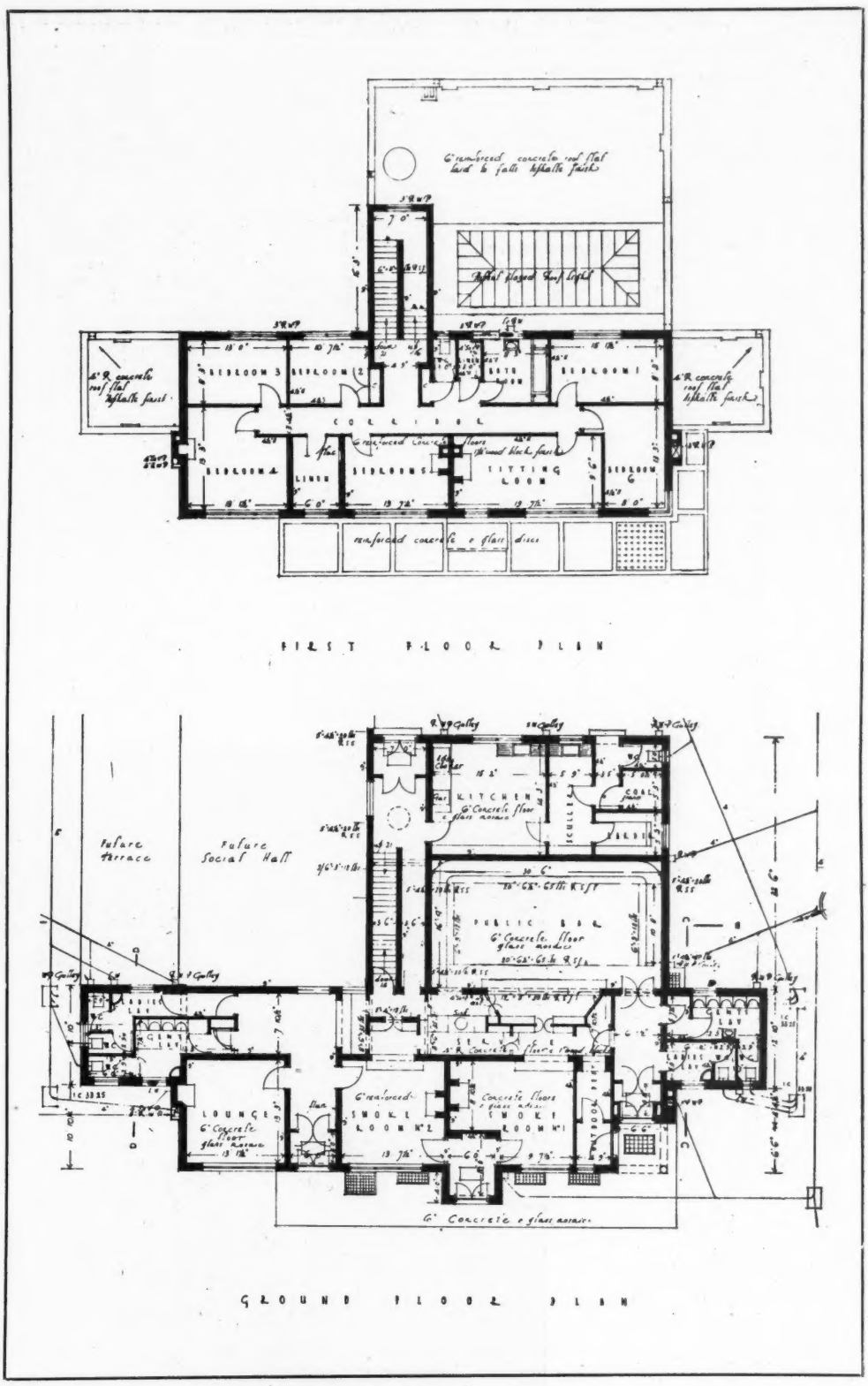


STAIRCASE TOWER.

THE KIRK SANDALL HOTEL, DONCASTER.

MESSRS. T. H. JOHNSON AND SON, F. and A.R.I.B.A., Architects

(See page 989.)



THE KIRK SANDALL HOTEL, DONCASTER.

MESSRS. T. H. JOHNSON AND SON, F. and A.R.I.B.A., Architects.

(See page 988.)

ILLUSTRATIONS

PLATES.

Scott Polar Research Institute, Cambridge.

The Scott Polar Research Institute was inaugurated in 1926, in memory of Captain Scott, for the furtherance of the work of polar research. The new building replaces various temporary homes occupied by the Institute, and is erected on a site provided by the University. It was built by the trustees of the Scott Memorial Fund. The building contains research rooms, a library and map-room, a manuscript-room and museum, as well as offices for the staff.

On the front is a bust of Captain Scott, executed by Lady Hilton Young (Lady Scott), and above it on the frieze running round the upper floor is a raised inscription. Above the windows on either side of the door is a keystone carved with a polar bear and a penguin, and the same motif appears in the column caps of the memorial hall, surmounted with an abacus carved in the pattern of snow crystals. Above the columns are two domes painted by MacDonald Gill with maps of the south and north polar regions respectively.

The building is of brick and stone dressings of Ketton. The memorial hall has a mosaic floor with a representation of the Plough and the Southern Cross. The library bookcases and tables are of oak. The map-room is lined with gaboon mahogany ply. The bronze statue in front was made and given by Lady Hilton Young.

The general contractor was Mr. William Sindall, of Cambridge, and the sub-contractors were as follows: Messrs. Bradford, floors; Ames and Finnis, roof (copper roofwork by Braby and Co.); Colliers, Marks Tey, bricks; Furse and Co., Nottingham, electrical work; Cash and Co., heating; Luxfer Co., metal windows; Laurence A. Turner, stone carving; MacDonald Gill, dome painting in entrance hall; Melson Brothers, furniture.

Sir Herbert Baker, R.A., and Mr. A. T. Scott, F.R.I.B.A., are the architects.

Police Headquarters, Courts and Fire Station, Newcastle-upon-Tyne.

This new scheme comprises two main sections, one combining the Police Headquarters and City Police Courts, the other the Central Fire Station, with firemen's quarters and dependent accommodation. With a dignified main entrance at the corner of Pilgrim-street and Market-street leading to the public office an entirely new note is struck in the lay-out of the arrangements for dealing with this important public service. No longer is there need for that furtive "under-suspicion" feeling associated with entering the old type of police station, where the punitive side of police work is as much, if not more, in evidence than the purely public service duties which form so important and valuable a feature of the force. For dealing with the darker side of police work, separate access is provided to the charge-room from vehicles entering through the courtyard and hidden from public view. The remainder of the ground floor consists mainly of private offices, staff rooms, and Watch Committee room.

The lower ground floor contains 14 cells, matron's room, baths and lavatories for prisoners, constructed on most hygienic lines, the cells being heated by invisible panels in the ceilings. Stairs lead direct from the cell corridors to the docks in the two courts. There are also on this lower floor, with separate staircase approach from Market-street, offices for aliens and coroners' officer, as well as purely police accommodation, consisting of lecture-room with cinematograph, tailors'-room, clothes store, printing, photographic and developing-rooms, book stores and filing-rooms, and rooms for electric switch boards, water meters and the telephone system. Further accommodation is found on first floor for police surgeon, court officers, and staff and private lavatories.

The whole of the second floor of the Market-street building is given up to the two police courts, with their associated rooms. This is a well arranged and dignified suite so planned as to exclude all external noise from this busy crossing, and acoustically the result is satisfactory. The ventilation has received special consideration, the air being screened, its temperature regulated and its introduction and extraction mechanically controlled. Public access to the courts is through the central doorway in Market-street, leading by way of a spacious staircase and an automatically controlled elevator to a lofty *salle d'attente* from which the courts on either side are entered through silence lobbies. Rooms for solicitors, witnesses and toilet also open off this waiting hall. At the Pilgrim-street angle is placed the magistrates' private suite, which has separate communication with the bench in each court, and a private staircase and lift from Pilgrim-street. The magistrates' clerk's private room and offices for his staff occupy half of the first floor, where is also situated the children's court. This chamber is entirely dissociated from the police courts, having separate entrance and staircase at the extreme end of the Market-street front.

The Fire Brigade Station occupies practically the whole of the site of the old police building, and is admirably planned for its purpose. Two-thirds of Pilgrim-street front on the ground floor is occupied by the spacious fire appliance hall with six sets of quick opening doors, and the watch room, superintendent's and public offices adjoining at the Worswick-street end. The large internal courtyard gives access to the rear of the appliance-room as well as to the building fronting Worswick-street, where are found the ambulance-room, police vehicles, motor cycle-room, machine shop, saddler's-room and laundry for married quarters.

On the several floors of the main building are located 21 houses for married police-firemen, and a good flat for the fire superintendent as well as for his deputy. On the roof of the building is a large playground for children. There is also accommodation for 33 single constables (11 firemen and 22 fire auxiliaries) with mess-room, reading- and writing-room, mess kitchen and caretaker's house. An electric lift is provided for residents.

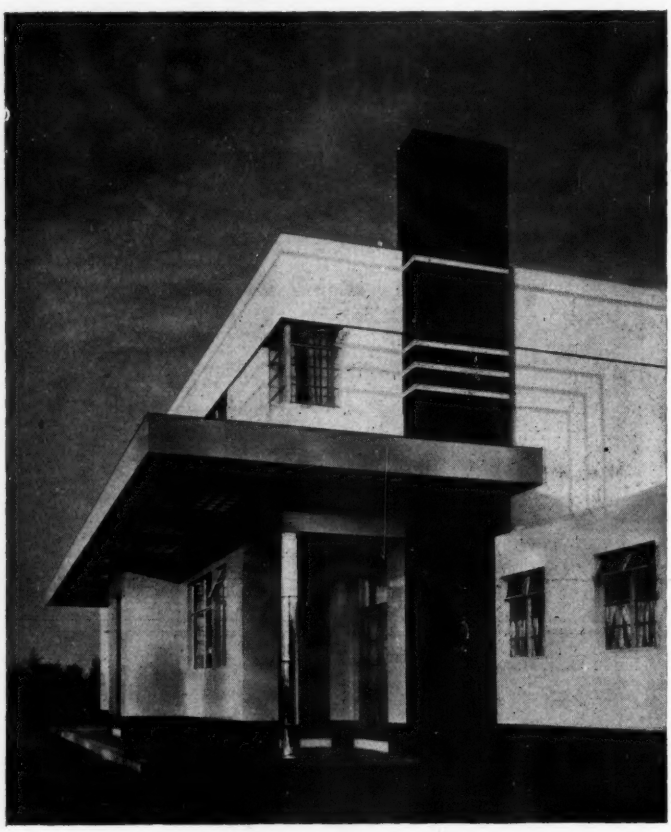
Stores, hose shop, battery-room, repair shops, emergency generating plant, etc., are provided in the lower ground floor of the fire station. The recreation side of the brigade activities is provided for by a large assembly hall and gymnasium with platform and cinematograph-room.

A detached block of buildings in the courtyard contains the boiler house plant, joiner's shop, repair shop and smithy, and a stable for ten horses with harness-room and hay loft. On the upper floor of this block is a billiard- and writing-room, and at one angle is the hose drying tower 84 ft. high, arranged externally for pompier drill.

The structural parts of the buildings throughout are of fire resisting material, being largely of reinforced concrete, faced externally to the two main streets with Portland limestone on a grey granite base. For main cornice and where the limited amount of ornamental work repeats, cast reconstructed stone is used in place of the more costly hand-worked Portland stone. The Worswick-street front is faced with grey bricks relieved with cast stone base and mouldings. The furnishings throughout have been specially designed to meet the detailed requirements of the several departments.

All the buildings, including the residences are provided with central heating and hot water. The lighting is by electricity and gas is provided for supplementary heating and cooking.

Externally, the design expresses in a dignified manner the nature of the building. The symbolical carvings of the griffins at the ends of the colonnades to Market-street and Pilgrim-street represent the idea of a watchful guardian. This mythical animal, with the body of a lion, conventional wings



THE KIRK SANDALL HOTEL, DONCASTER: Detail of Entrance Front

MESSRS. T. H. JOHNSON AND SON, F. and A.R.I.B.A., Architects.

and head of an eagle, suggest the attributes of power, watchfulness and swiftness to act, qualities equally appropriate to the operations of the law as to the duties of the fire brigade.

The general contractors were Messrs. Alex. Pringle, Ltd., Newcastle, who were also responsible for the Portland stonework. The principal sub-contractors included :— Patent Impervious Stone Co., Ltd., artificial stonework; R. W. Cairns, heating; G. N. Haden and Sons, Ltd., ventilation system; Falconar, Cross and Co., Ltd., electrical installation; Smith, Major, and Stevens, Ltd., lifts; Decorative Plaster Co. (Newcastle-on-Tyne), Ltd., fibrous plaster; Robert Beall, carving; T. B. Colman and Sons, Ltd., revolving doors; Rowells, Ltd., tile and terrazzo work; Standard Insulator Co., Ltd., rubber flooring; Korkoid Decorative Floors, cork flooring; May Acoustics, Ltd., acoustic plaster; Shanks and Co., Ltd., and Adamsez, Ltd., sanitary fittings; Robson and Sons, Ltd., fittings and furnishings; N. F. Ramsay and Co., Ltd., hardware, etc., bronze entrance doors; James Gibbons, Ltd., cell doors; A. M. McDougall and Son, wood block floors; Val de Travers Asphalte Co., asphalt; Ratner Safe Co., Ltd., strong-room doors; Musgrave and Co., Ltd, stable fittings; Francois Cementation Co., Ltd., piling.

The architects are Messrs. Cackett, Burns Dick and Mackellar, F. and A.R.I.B.A.

The Kirk Sandall Hotel, Doncaster.

So far the external use of glass in England has been limited to a few buildings, but lately Messrs. Pilkington Brothers, Ltd., the glass manufacturers of St. Helens and Doncaster, have demonstrated very fully the practical application of glass to a modern building in the Kirk Sandall Hotel, erected to the designs of Messrs. T. H. Johnson and Son, F./A.R.I.B.A., of Doncaster, in their Kirk Sandall Village, adjoining the Doncaster Glass Works. The internal decorative schemes have been carried out in collaboration with the architectural department of Messrs. Pilkington Brothers, to the designs of Mr. Kenneth Cheesman and Mr. A. S. Pollitzer.

This interesting building is faced externally with shell pink and turquoise blue "Vitrolite." Passing under a glass tiled marquise, one enters a primrose coloured vestibule, glass walled and floored, leading to the public bar. In this room two bands of colour running round the "Vitrolite" walls form a refreshing contrast to the appearance of the usual tap-room. Two of the most attractive rooms are the smoke-rooms.

"Vitrolite" glasses in various colours complete the numerous service fittings behind the bar counters, and the same material has been used throughout all the corridor and lavatory walls. Glass is used everywhere, and is particularly successful in its numerous flooring uses, which with their sandblast surfaces are entirely non-slip.

The general contractors were Messrs. Walter Firth, Ltd., Doncaster. Among the sub-contractors and craftsmen were the following :—G. Ness, Harrogate, steel reinforcement; J. Hadfield and Sons, Ltd., Sheffield, asphalt roofing and Tarmacadam paving; Hollis Bros. and Co., Ltd., Hull, wood block flooring; H. Braithwaite and Co., Ltd., Leeds, central heating; George Wright, Ltd., Rotherham, stoves, etc.; Mellowes and Co., Ltd., Sheffield, metal casements; Helliwell and Co., Ltd., Brighouse, patent glazing; Luxfer, Ltd., London, pavement lights; Dixon, Powner and Sons, Ltd., Leeds, collapsible gates and balustrades; Baxendale and Co., Ltd., Manchester, sanitary fittings and ironmongery; Pel, Ltd., Birmingham, furniture; Gaskell and Chambers, Ltd., Sheffield, beer engines; B. James, Chesham Bois, curtain fabrics, etc.; Venesta, Ltd., London, flush doors; Troughton and Young, Ltd., London, lighting fittings; Frank Baker and Sons, Ltd., Birmingham, metal letters; J. and R. Pearson, Ltd., Birmingham, stainless steel strips; Pilkington Brothers, Ltd., all glass, including "Vitrolite" and decorative glass.

SOCIETIES AND INSTITUTIONS

WEST YORKSHIRE SOCIETY OF ARCHITECTS.

Art and Industry.

Mr. Victor Bain, President, took the chair at a meeting of this Society, held at the Leeds College of Art recently, when a discussion took place as to the relationship between Art and Industry. The President, in opening the discussion, said that if success was to be attained in industry it must walk hand in hand with art. The two should be inseparably linked together or one of them would suffer. From ancient times one could see the true union exemplified in the crafts of the mason, the potter, and the metal worker; and in many others they had ample proof of the important part which art had played in the past. In the Renaissance period it might almost be said that industry had been the means of "merchanting" art. He thought the idea was growing, and that it was only the war of prices which prevented their producing to-day wares of a higher level of craftsmanship than ever before. The influence of surroundings upon employees was being appreciated, and even the engine-room of a modern factory had its æsthetic amenities, as being the hub on which all else revolved; but much still remained to be done to bring art and industry into their proper relationship.

Mr. Norman Culley said he thought it was a great pity that art and its consequences should be so largely in the hands of politicians, who tended to regard art as a luxury rather than a necessity. History should be compiled from a march of the arts, and not from the march of armies, which were the consequence of quarrels between nations. The age when the Grecian cities were isolated and rivalled each other in producing masterpieces was the supreme age of art, and from art industry should never have been divorced.

Mr. D. S. Andrews, principal of the Leeds College of Art, referring to the Gorell Commission, said that when the English set out to solve any question they first formed a committee, which in turn formed sub-committees. What had been proposed by the Commission, viz., the inculcation of an artistic spirit into the child's mind, might produce some effect in, say, 25 years, but he felt that something ought to be done which would show results much sooner than that. He thought the industrial artist was poorly paid, and in any case should not be employed upon what he might describe as museum pieces, but be set to produce articles of daily use, which should be at once beautiful and cheap in price.

Mr. G. H. Foggitt compared the design and craftsmanship of the eighteenth century with that of to-day, a difference, he said, not adequately explained by change in fashions. More stability of thought was wanted and less reliance on new-fangled ideas.

Mr. R. A. Easdale said that the Great Exhibition of 1851 was responsible for much bad art, and had a most disastrous effect on the crafts of the following decades. They were only just emerging from the Slough of Early Victorian Despond.

After further discussion, it was resolved : "That this meeting considers that one of the greatest ills from which modern civilisation suffers is the divorce of art from industry."

Tenements or Estate Houses?

Mr J. H. Wales took the chair at a meeting of the Students' Union of this Society held at its Leeds headquarters on November 22, when the subject for debate was : "That tenements were more suitable for the working classes than estate houses."

In opening for the proposition, Mr. R. Middleton said that tenements were the only satisfactory and economical way of dealing with the problem. From the town-planning standpoint, it was necessary to clear away the hopeless muddle of small streets and houses, and by the tenement principle they would only need 5 per cent. of the site for their buildings, thus leaving the balance available for gardens and recreational purposes, and so add a new park area to the city. The housing estate always impressed him as being the erring daughter of the garden city, and its distance from industrial centres only caused the occupants to add travelling costs to their rent, a fact often omitted by its supporters. The advantages of tenements were numerous and convincing; they had rubbish shoots, communal heating and hot water, roof gardens and play centres. The housing estate was only a dormitory suburb. No doubt the want of privacy in tenements would be stressed by their opponents, but that was only a matter of mass psychology. Old-fashioned ideas should be ignored, and, in the words of Sir Giles Gilbert Scott, "the young should break through old restrictions and old conventions that have died."

Mr. F. Digby Firth thought that estates were too parochial. In properly planned flats no rooms were overlooked by others, and tall buildings were immune from the smells and vapours that clung to the ground. A common garden had much better chance of being upkept than private plots. The wasted time spent in travelling had also to be taken into account.

Mr. H. Hall said that the expense of roads, grass verges, and policing made the estate a more costly proposition, besides being more spreading and thus spoiling the countryside. Well-planned tenements brought the country into the city.

Speaking in favour of estate housing, Mr. R. Thompson said that an Englishman's home was his castle. He loved his home and his garden, privacy and good fresh air. There the children were kept off busy city streets, and had their recreation in healthy surroundings. In flats people were liable to the nuisance of noise made by their neighbours above, below, and at the sides. Infectious diseases spread more rapidly in tenements, close contact being the cause. One of the greatest disadvantages was the necessity for numerous stairs to climb, and the danger of these to children.

Mr. W. R. Hall, commenting on the proposer's plea that lifts could be provided to do away with objections to stairs, said that in most industrial centres one could not build higher than four stories, and the cost alone would put lifts out of the running.

Mr. F. W. Thorne thought that nationality played a great part in these matters. They were more communally minded on the Continent, and were more content to herd together. English mothers did not like their children to play in communal grounds.

Miss Marion Broadbent was in favour of estate housing. Speaking from the woman's point of view, she thought that the idea of many families being "bunched up" into one building was abhorrent. She had no opportunity to display her originality, say, in the way of curtain schemes. The human element was altogether submerged.

Mr. K. Warman said that the majority of estate dwellers took a keen pride in their gardens, and there were competitions for the best which were hotly contested. They provided healthy recreation for the dweller in his leisure time.

After further discussion, in which Messrs. S. Webster, C. E. Tooley, A. Antrum and K. A. Jones took part, a vote was put to the meeting, with a result that a majority decided in favour of estate housing.

EDINBURGH ARCHITECTURAL ASSOCIATION.

The notable services of the late Sir Rowand Anderson in securing improvement in the training facilities for architects and in the formation of the Institute of Scottish Architects, now the Royal Incorporation of Architects in Scotland, were referred to by Mr. A. F. Balfour Paul, F.R.I.B.A., when he delivered the inaugural address for the session of the Edinburgh Architectural Association. Mr. Balfour Paul, who is President of the Association, chose for his subject "A Pioneer of the New Road." There was, he said, no

stopping by the way possible. They must advance if they were to do any good. By affiliation to the Royal Institute of British Architects their opportunities, though they might still be territorial, were widened, and as one of its allied societies they had a voice in all affairs dealing with the profession, especially this year, possibly more than in any other year, as the past-president of the Incorporation was president of the allied societies, and, as such, vice-president of the Royal Institute of British Architects. It had to be kept in mind that a rough road necessitated anxious care and discriminating thought by those using it, whereas one was apt to take things somewhat for granted on a wide and signposted highway. They might get careless, they might travel too fast without proper control, they might even side-slip into danger or catastrophe, and it could only be by keeping the high ideal towards which the road led on the lines of the trail, which was blazed by Anderson, definitely in their minds that they could fulfil the objects for which it was constructed. The far-spreading and elastic voluntary organisation of the R.I.B.A., and its allied societies, working in harmony with the statutory machinery of the Architects' Registration Council, gave them the power to produce vast improvements in the status and the welfare of the properly qualified architects of this country.

GLASGOW INSTITUTE OF ARCHITECTS.

The President of the Glasgow Institute of Architects, Colonel J. Maurice Arthur, at the meeting on November 14 of the council, was formally invested with a presidential badge by Mr. W. B. Whitie, President of the Royal Incorporation of Architects in Scotland, of which the Glasgow Institute forms a Chapter. Mr. Whitie referred to the many distinguished architects who had occupied the presidential chair since the Institute was founded over 60 years ago, and expressed his pleasure that the Institute should now possess such an official badge of office, which, while it could not add anything to the respect in which they held their presidents, was a fitting adjunct to the office. He was sure that the present President and his successors would worthily maintain the traditions of the Institute and treasure the badge when it was handed over to their keeping. The badge had been designed and executed by Mr. Walter Gilbert, who had been responsible for notable examples of metal craftsmanship at the Masonic Peace Memorial and at the Liverpool Cathedral. His design was in the form of an oblong plaque with low relief enrichment symbolic of the traditional founding of the city and telling the story of St. Kentigern and his mother, St. Tenaw.

In accepting the badge and thanking Mr. Whitie, Colonel Arthur expressed his pleasure at being the first wearer of it, and his satisfaction that the Institute had now a badge which was worthy of its artistic aims.

ROYAL INCORPORATION OF ARCHITECTS IN SCOTLAND.

The monthly meeting of the Council of the Royal Incorporation of Architects in Scotland was held at 15, Rutland-square, Edinburgh — Mr. William B. Whitie, President, in the chair—when the silver medal gained by Mr. Martin Gardner, of the Edinburgh College of Art in the Rowand Anderson competition was presented along with other prizes gained by competitors in the various competitions. It was resolved to institute a class of " Retired Fellows."

Sir D. Y. Cameron, R.A., Principal Sir Thomas H. Holland, and Mr. George Pirie, P.R.S.A., were nominated as Honorary Fellows of the Royal Incorporation.

The following new members were elected :—Messrs. J. S. Lawson, Dyce N. C. Levie, Dundee; William S. Young, Perth; Duncan M'Culloch, junr.; A. C. Sutherland and N. R. J. Johnston, Glasgow, and G. K. Lambie, Newton-Mearns, as associates; and Messrs. Alexander Green, G. B. Biggar, and G. I. Hunter, Glasgow; C. M. Davidson, Bearsden; and Alexander M'Neil, Denny, as students.

INSTITUTION OF STRUCTURAL ENGINEERS.

Mortar Tests and the Strength of Concrete.

A paper entitled " Mortar Tests as a Guide to the Strength of Concrete " was given by Mr. W. H. Glanville, D.Sc., Ph.D., M.Inst.C.E., M.I.Struct.E., and Mr. D. A. G. Reid, B.Sc., A.M.Inst.C.E., at a meeting of this Institution held recently.

It had been realised for a number of years, the paper stated, that the present form of strength test included in the British Standard Specification for Portland cement had a very limited relation to the strength properties required from the cement in practice. Although the test was of value in so far as it might provide an assurance that the cement, when used with sound aggregates, would produce mortars and concretes of adequate strength for many purposes, it did not place the various marketed cements in an order of strength which could be related in any known way to the strength of products made from the cement.

The necessity for a test result which might be regarded as a reliable index of strength in practice arose principally in the use of cement in concrete and reinforced concrete construction, where the strength of the concrete was an important factor, and to which working stresses were definitely related in design. The need for such a test had become more marked with the introduction and increasing use of rapid-hardening cements.

The tests described in the present paper were devised and carried out with the single object of examining simple forms of test to find out whether any form of small-scale laboratory test could be recommended as providing a fairly definite index to the strength of concrete. In the early part of the investigation tests were made on graded sand mortars in the proportions of 1 : 3 and 1 : 2 by weight, as well as standard sand 1 : 3 mortars. These tests indicated that standard sand mortar strengths formed as good a guide to concrete strength as those with graded sand. The latter were therefore discontinued, and subsequent tests were made on 1 : 3 standard sand mortars only.

Tensile, transverse and crushing tests were made on the mortars in addition to the tests required by the B.S.S., and transverse and crushing tests were made on 1 : 2 : 4 concrete. For each form of tests three water contents were used representing dry, medium, and wet consistences. It was shown that the strengths of the concrete of the different consistences were definitely related; comparisons with mortar strengths were therefore shown with one consistence of concrete only. The strengths of the mortars of different consistences were not similarly related, and as a general rule the strength of the wet mortar was a greater proportion of the strength of the dry mortar for slow than for rapid-hardening cements.

The value of the mortar strengths as a guide to the concrete strengths increased as the consistence of the mortar was made wetter. Neat cement and dry mortar mixes formed a very poor guide to the strength of concrete, particularly when the various ages of testing were not considered separately.

The best guide to the crushing strength of concrete was given by the crushing strength of mixes of 1 : 3 standard sand mortar as used under the B.S.S. for Portland cement, but with a water content of 12½ per cent. of water by weight. The results enabled the concrete strength at the same age to be estimated in the majority of cases to within 10 per cent., and, in the worst case recorded, within 25 per cent. The coefficient by which the mortar strength had to be multiplied to obtain the strength of 1 : 2 : 4 (by weight) concrete, with a water-cement ratio of 0.60, had a mean value, for all ages and cements, of approximately unity.

The best guide to the transverse strength of concrete was given by the transverse strength of wet mixes of 1 : 3 standard sand mortar, although the tensile strength of these mixes was practically as good. The percentage range was about the same as already indicated for crushing strengths.

A few tests made with high alumina cements had shown that the wet mortar strength might be used as guide to concrete crushing strength within the same degree of accuracy as might be expected with Portland cements, the mean ratio of the coefficient by which the mortar strength must be multiplied again approximating to unity.

The recent investigations by Werner and Hedstrom in Sweden had led to the conclusion that a definite relation exists between transverse (and, therefore, tensile) and compressive strengths for wet mixes. This agreed with the results published by Reed-Lewis in America, and was confirmed, as an approximate relation, by the results presented in that paper. Since, however, tensile strength tended to a limiting value at an earlier age than compressive strength, and a small change in transverse strength was then accompanied by a large change in compressive strength, it would seem advisable in estimating the properties of a cement to examine both the transverse and compressive strengths. This was particularly important with high strength cements.

THE CHARTERED SURVEYORS' INSTITUTION EXAMINATIONS.

For the information of examiners, teachers and others concerned, the Council of the Chartered Surveyors' Institution announce that candidates sitting in March, 1935, for the professional examinations in Building and Quantities will be expected only to show acquaintance with the Standard Method of Measurement as now in force, and not with the revisions incorporated in the new edition of the Standard Method of Measurement which, though not yet published, will probably be issued and in operation by the date of the examinations.

SOCIETY OF ANTIQUARIES.

A description of the excavations which he had conducted at Avebury on behalf of the British Association between 1908 and 1922 were described before the Society of Antiquaries by Mr. H. St. George Gray, who said that in point of size and grandeur Avebury stood out pre-eminently among the prehistoric stone monuments of Great Britain, though vandalism had made it difficult to appreciate the full glory of the original structure by the destruction of 95 per cent. of the great monoliths. The area was usually recorded as 28½ acres, surrounded by a vast fosse and a vallum of imposing height. The circumference of the vallum at Avebury was four times as large as that of the Stonehenge fosse. Excavations had been confined chiefly to the fosse on the southern side.

There could be little doubt, said Mr. Gray, that the Avebury fosse and vallum belonged to the transition period between the Neolithic and Bronze Ages. No metals appeared in the lower levels, but there were tools of stone, antler, and bone, including flint implements, antler picks, hammers and rakes, and bone shovels. This evidence was supported by the discovery of very interesting types of pottery. The whole group might be assigned to the overlap period in North Wiltshire between the end of the Neolithic, marked by Peterborough ware, and the dawn of the Bronze Age, heralded by the beaker.

Otford Palace, Kent: Preservation Scheme.

Resolutions submitted to a conference at Otford Palace, Kent, urged that, upon the consent of the owner, there should be a public appeal for £200—the sum estimated by the Society for the Protection of Ancient Buildings to be necessary to secure the remains of Otford Palace from the ravages of the weather. It was further desired that the Sevenoaks Council should study the best method of acquiring the buildings and curtilage and vest them in the National Trust for Places of Historic Interest, and also examine the possibilities of forming a garden and museum for public use.

THE TOWN PLANNING INSTITUTE

THE PRESIDENT'S ADDRESS.

THE first meeting of the session of the Town Planning Institute was held at the Central Hall, Westminster, on Friday, when Mr. H. H. Humphries (City Engineer, Birmingham) delivered his presidential address.

The President, in the course of his address, said the Institute was a splendid example of what co-operation could do, and there were few societies where there were gathered together so many different professions working in such harmony to attain the ideals they held. Undoubtedly in the course of their work they had come to recognise that without such co-operation it was not only difficult to make successful schemes, but also to educate the country to the need of them.

At present, said the President, there appeared to be no propaganda work for town planning being carried out upon anything like a sufficient scale, and everyone must agree that, until some strong leading body took the work up seriously, progress must necessarily be tardy. Many very pleasant country meetings of the Institute had been held, all of which had been valuable to them as town planners, but as a means of spreading the gospel of planning amongst the populace, he would imagine they did not go far. It was a matter which would appear to demand some investigation. Many pressing problems of immense interest to members were waiting solution. One of those which was of extreme urgency was devising means to minimise the dreadful toll of the roads. In this connection there might, of course, be some things rather outside the purview of town planners as such, but, when it was remembered that they were responsible for the designs of new roads and for altering old ones, for making connections to both of them, etc., it was evident that the town planner could, and ought to, play a large part in designing means to ensure as far as possible the safety of traffic of all kinds. In times past the Institute had given a great deal of attention to such questions and had devised schemes, particularly in connection with the design of road junctions, which undoubtedly had proved of value. Despite this past work, it appeared to be an opportune time now for the whole matter to be surveyed and re-surveyed, which survey should not be confined to such matters as design of road junctions, but should also include the layout of the roads (upon which the country was waiting for authoritative advice), with provisions for the safe crossing of carriageways by pedestrians, etc.

Housing of the Workers.

The second matter to which he desired to direct attention was that of the housing of the working classes. This was becoming a burning question in many parts of the country, particularly in regard to rehousing slum dwellers. It was not in regard to whether people without houses should be housed or slums cleared and the dwellers rehoused (there being no difference of opinion about the necessity of those requirements), but as to the *manner* in which future housing and rehousing should be undertaken. The point at issue was whether, in large towns, the working class should be housed by means of self-contained houses, or in blocks of tenements or flats. The municipal housing schemes, with few exceptions, had provided single houses for the people, largely within the suburbs of the towns. These had been laid out upon pleasant, healthy and spacious lines, and there was no doubt as to the splendid return in the way of health and happiness of the people. The need for the erection of great numbers of such houses so rapidly in large towns had prevented the formation of complete communities as might be the case with more or less slowly developing areas. It would probably be agreed that segregation of sections of population, which had quite necessarily had to take place under such circumstances, was to be regretted. No community appeared to be more happy, contented, and with so much of the desirable community spirit, as one which was found, like a town, with all branches of the population living within it.

Another point in connection with these new communities was that, as building had proceeded, they had had to spread over a town's often far-flung suburbs, entailing time getting to and from work and high cost of transport. Although there appeared to be but little complaint in regard to the first one, the second one needed consideration. In Birmingham, workmen's omnibus fares were reduced to meet this difficulty, which seemed to have been a reasonable and helpful thing to do. Indeed, it appeared to be, perhaps, a point for balance as to whether it was advisable on the part of the authorities to help with the transport question in that way rather than meet the extra cost of building sites near the town centres.

Just the same, it was obvious that a certain number of tenements must be provided in any town of large size (it really did not affect smaller towns, except in exceptional circumstances). This was often assented to by opponents of the "flat" theory, but their desire was to keep the number of such tenements to a minimum, and not to extend their use beyond these special needs.

The alternative to the erection of blocks of flats (when that method of housing was sometimes thought to be the only one) was the drastic step of establishing self-contained communities, or what were generally referred to as "satellite towns." That, of course, meant the laying out of a community complete with residential, industrial, commermercial, recreative requirements, including proper communication with the parent town, and, in fact, all the elements required in a well-planned small town. The difficulties of doing this were, no doubt, great, but the question as to whether they were possible of solution was one which, given vision and energy, might surely be answered in the affirmative. Such a community site would have to be very rapidly laid out and built and industries established in time to employ the people, and all the other requirements of such an establishment would have to quickly follow. There would be no difficulty, if the opportunity offered, despite the speed required, in constructing such a satellite town, efficiently and pleasantly planned, with factories, houses, etc., and the necessary amenities. The chief difficulty would be in regard to the movement of industries in time. Sufficient new industries in some towns were not likely to eventuate quickly enough, but in all large towns there were numbers of industries being carried on in out-of-date works, some of which were practically worn out, and it often appeared that slum clearance schemes were wanted for works as for houses. Some method, therefore, required to be devised to enable such undertakings to be transferred to the proposed community, and this might require particular assistance of some kind. If carried out, the ultimate benefit should be great. The factories, etc., would be more efficient in every way than the old ones; there would be more space available for them, and, later, for needed extensions; while the people would be able to live in healthy, spacious surroundings. Surely that was a method of dealing with the problem of rehousing, which was for the benefit of the parent town (by relieving the congestion in it), the people to be removed, and industry.

It was often asked what would happen to the sites now occupied by slum houses and works that might be removed? His view was that the increase of "elbow room" in the towns would be extremely valuable. There would be space for replanning such areas, for such industrial extensions as might be advisable, for extending commercial areas, for providing greatly needed open spaces, and for some rehousing. Manchester was making a great experiment in establishing a town largely of the kind in question at Wythenshawe, where she had already built large numbers of houses, and the industrial area, planned for the community, was developing. The whole scheme would undoubtedly have, from all points of view, a splendid result.

The one thing which emerged from any serious contemplation of the problem of housing was the certainty that what was done would have a tremendous effect upon the future of the nation and, therefore, it should be dealt with as of the gravest moment.

Another matter which called for attention arose from the astonishing development of aerial navigation in recent years, and the immediate prospect of its further rapid progress made the provision of aerodromes an important item in town planning.

Planning for the Future.

With regard to the future, the first thought that arose was that, inasmuch as town planning was obviously intimately connected with the growth of population, and as the birth-rate had been falling, the town planner had to consider whether a few generations hence the population would have reached a static figure, or might even be declining. Even if that were so, however, the necessity for town planning still remained. There was an immense amount of replanning to be done, and there was the factor that in certain districts there would be immigrant populations due to growth or of shifting of industry. In any case, the town planner would always be on safe ground in preparing a scheme, inasmuch as the chief features of his plan were concerned with what was to be done if there was development. Taking a large view of the future of town planning, there also came to mind the fact that that future would be very much affected by the development of applied science, and by national economic policy. In their national economic life the comparatively new factors of tariffs, quotas and subsidies must, in their effect on manufacturing industries, agriculture, etc., have considerable reactions upon town planning, and then, also, there were the effects of afforestation and land reclamation schemes. These measures might easily result in a systematic national economic planning by the Government. Indeed, it was not carrying imagination too far, perhaps, to visualise the surveying of the whole country, particularly with regard to the best utilisation of the land for agriculture, pasturage, etc., resulting in a definite allocation of certain areas for specific purposes. Possibly there might also be some attempt at the siting of industries. In this connection one saw the possibility of introducing planning by means of satellite towns. He referred, of course, to the kind of satellite town established by gradual growth. At a certain point building development in the parent town was prohibited, and, moreover, a belt of surrounding rural land was sterilised from building, so that any future development which would ordinarily have taken place in the parent town had to go beyond this belt. It was, of course, obvious that one of the chief difficulties in the way now of such a satellite planning system was the economic effect of the prohibition of building on the belt of land between the parent town and the satellite towns, and the consequent opposition of landowners in a growing district who would thus be prevented from lucrative building development.

Alderman E. Culpin (vice-chairman, L.C.C.) proposed a vote of thanks to the President and touched on many of the points raised in the address. With reference to the problem of cottages as against flats for the housing of the working classes, he expressed his pleasure that ten-story flats had not yet come to London. He hoped something could be done with regard to satellite towns, but the great problem was how they could get industry to those places. It was a good thing to have a town without a slum, but a terrible thing to have a town without a soul—that was what Becontree was.

Dr. Maxwell seconded the motion, which was heartily carried.

"THE SEASIDE"

LECTURE AT THE ARCHITECTURAL ASSOCIATION.

MR. F. R. YERBURY, Hon. A.R.I.B.A., delivered the fifth of a series of public lectures on "Building England," organised by the Architectural Association, at 36, Bedford-square, W.C., on Saturday afternoon, December 1. The subject of the lecture was "The Seaside." The lecturer said that compared with an inland village or industrial centre, the planned seaside resort was a comparatively new idea, for it was not until the middle of the 18th century that sea bathing was indulged in. The invalid seeking health confined his visits to inland spas, such as Bath (where he both bathed and took the waters) or Tunbridge Wells. Until about 1750, when the great Dr. Russell, of Brighton, advocated not only bathing in the sea, but also drinking the sea water, the numerous fishing villages and small ports on the coast were little, if ever, visited, and certainly not as holiday resorts.

With the popularising of Brighton as a centre of fashion for bathing and the pursuit of health, enhanced by the patronage of George III. and later by the long residence of the Regent, Brighton set an example to other seaside places in its development, and was rapidly followed by such places as Weymouth and Margate. The 19th century saw an enormous increase in the developed seaside resort. Fortunately the development of many of these places late in the 18th century and early in the 19th century took place at a time when proper planning and good architecture were well understood. We could see in Brighton particularly the effect of this good planning in the magnificent Regency architecture, the squares and terraces facing the sea, which added to the amenities of the district rather than detracted from it.

Although it might be said that no serious criticism could be offered against the early-developed parts of most of our seaside places, severe criticism could certainly be levelled against the development on their outskirts and on the great roads leading to them from some of the important inland cities. If ribbon development should be prevented anywhere, surely the English coast had a great claim to protection. It must be regretted that many of our seaside Corporations either had no powers, or made little use of those they had, to prevent the spoliation of the coasts lying between them and adjacent towns. For their own protection and for the benefit of the visitors they hoped to attract, it would surely seem essential that many of them should take very drastic steps to prevent the erection of flimsy, badly designed bungalows and shacks of all sorts, which were a growing menace. One might quote certain districts on the Kentish coast which were a complete disgrace. The view from the foreshore inland was deplorable, and gave the impression of rapidly developing (although rather expensive) slums. That kind of growth at the seaside was thoroughly unsocial, and unfair to the nation. It was a pity that some of our energetic busybodies who did everything they could to control the pleasures of people on their seaside holidays could not transfer those energies into a very drastic control of the buildings which were put up as permanent erections in almost any position, without any sense or thought of proper planning. The prosperity of many of our seaside towns would unquestionably decline unless something were done to prevent the haphazard growth which was in many cases rapidly proceeding. It was quite natural that people building at the sea should want a sea view, but compare some of those outlying shack towns with some of the 18th century or early 19th century crescents and terraces, which gave residents all the advantages of a sea view and at the same time retained a dignity and orderliness which were lasting.

Many of our coast resorts and the surrounding districts were now being dealt with under the provisions of various town-planning Acts, and the benefit of this was obvious. The ever-increasing numbers of people who spend their holidays at the sea must be reckoned with, and must be provided for; nor must it be overlooked in the planning what the functions of a seaside resort had become. Some people visited the sea for health, others for a jolly good time. The family taking its all too-brief fortnight in the summer should be allowed to do within reason almost exactly what it liked, and every provision made for the full-blooded exuberance which came to a person with the sea breezes when released from the drudgery of the rest of the year. The great amusement parks which provided thrills for the old and young should not be despised, but should be placed in the right positions, properly planned, and made better and better and more exhilarating. "Dreamland," at Margate, for example, was a fine example of that kind of thing well done.

The proper planning of the seaside resort did not end with the resort itself, but must be linked up with planning of roads to the nearest industrial centres, and here again control was essential if those new roads were going to capture any of the attractiveness of the old. Services such as petrol stations, refreshment houses and inns were essential to transport, but there was no reason why they should be, as they unfortunately so often were, an eyesore and sufficiently ugly almost to mar the pleasure of any journey.

Anyone privileged to build a completely new seaside resort on a properly planned basis would probably produce something quite different from those created a hundred years ago. He would probably plan his front to the sea for restaurants and hotels, with the road in front of them completely given up to pedestrian traffic, and with wide lawns and flower gardens leading to the parade and beach itself. The new railway station would be brought as near to the sea front as possible, but it would bring the traveller out into a well-designed and tree-planted forecourt which would give him a glimpse of the sea immediately upon his arrival. Coaching stations would be provided in the proximity, and parking places for private cars. There would, of course, be an aerodrome, as before many years had passed every seaside resort would possess one. The ideal seaside resort could only be developed by real planning, and a plan which not only made provision for the present but for all sorts of future developments. With the magnificent coast which Great Britain possessed we should easily be able to retain a supremacy in seaside resorts on account of natural beauties, fine bathing beaches and health-giving air, if we made provision for the protection of those amenities by properly conceived co-ordinated plans.

INCORPORATED CHURCH BUILDING SOCIETY.

At the meeting of the Incorporated Church Building Society, held on November 15, Mr. E. G. Antrobus, C.M.G., in the chair, grants were made towards building new churches at Becontree, S. Mary, £200; Cove, S. Christopher, £150; Shaw Hill, SS. Mary and John, £75; grants towards enlarging reseating or repairing churches were made as follows:—Arnesby, S. Peter, £10; Beaufort, S. John, £20; Bishampton, S. James, £25; Flint, S. Mary, £75; Gobowen, All Saints, £75; Hook Norton, S. Peter, £15; Leyton, S. Mary-the-Virgin, £30; Pendleton, S. Thomas, £75; Puttenham, S. Mary, £25; Shabbington, S. Mary, £20; Steeple Ashton, S. Mary, £15; Stoke Courcy, S. Andrew, £10; Strubby, S. Oswald, £20; Talland, £25; Welling, S. John, £100; and Withycombe, S. Nicholas, £25.

It was stated at this meeting that His Majesty the King had graciously contributed £100 towards the objects of the society, which is dependent upon voluntary contributions and urgently needs more generous support to enable it to continue and extend its work.

Poplar Borough Surveyorship.

As a result of the retirement of Mr. E. G. Timbrell, Borough Engineer and Surveyor, Poplar B.C. are to invite applications for the appointment. The commencing salary will be £1,000.

"HOUSING ENGLAND"

A NEW SURVEY OF HOUSING AND BUILDING.

SLUM-DWELLERS, although the most unfortunate class of badly housed people in this country, are not the largest class. The wage-earner with a family income of, say, £3 or less a week, is often not a slum-dweller, but he is often wretchedly and expensively housed. Can anything be done for him and his family without a reorganisation of the entire building industry? Can suitable new housing be economically provided without subsidy for the lower-paid worker? How far is bad housing a problem of the building industry, due to costly and old-fashioned methods, and how far is it due simply to poverty, which prevents many families from affording the accommodation which by modern standards they ought to have?

During the past two years a group of younger architects, surveyors and members of the building industry who belong to the Political and Economic Planning Group (P.E.P.) has been seeking the answer to these and many other key questions. Its report, "Housing England," now published by P.E.P., 16, Queen Anne's-gate, S.W.1 (price 5s.), runs to nearly 150,000 words. It attempts for the first time to give a survey or map of the housing problem as a whole—how it touches the building and building materials industries, how it touches population, how it touches labour, and so forth. It is only possible to mention here a few of the interesting assertions made in the survey:

200,000 new houses a year are needed for the next seven years, and in order to be within the means of tenants at least half of these must be let at rents averaging 10s. per week. This includes the half-million extra houses which will probably be needed by 1941 to cope with the increase of families in England and Wales.

The lowest average economic rent at which it has recently been possible to build is about 11s. 8d. a week, including rates; this could be reduced to about 10s. by better arrangements.

Bricks and bricklayers' wages form up to one-third of the total cost of a working-class house. The hand-to-mouth working of the industry is illustrated by the fact that building operatives can be dismissed at an hour's notice.

Many wage-earners pay up to 10 per cent. or more of their weekly incomes in local rates—a modern house tax as evil in its effects as the notorious old window-tax.

New building methods and materials have to be passed by so many authorities that thousands of pounds are wasted in getting a single improvement authorised all over England.

The present structure of the industry encourages periodical slackness followed by booms and inflation of prices through "rings."

The building industry is the one big industry where further mechanisation and economy in use of labour would actually decrease unemployment, by tapping a vast demand for building now unsatisfied because building costs too much.

The Report concludes that new organisations should be started on a national scale, but without monopoly rights, one to own and manage and the other to build workers' housing: that a new national authority for building standards is necessary in order to cut through the clutter of out-of-date regulations: that a definite national minimum standard for housing is needed: that housing should be licensed for definite periods and that licences should only be renewed provided the accommodation still comes up to the required standard.

We propose to review this interesting and constructive contribution to a solution of the housing problem at greater length in a later issue.

FACTORY PLANNING TO-DAY

In a paper read before the Institution of Engineering Inspection and the British Works Management Association recently, Mr. Hal Gutteridge, A.M.I.Mech.E., M.I.E.I., said that the motives which influenced the choice of a factory were many, and an attempt was made in a survey to discover what were the motives which led to the choice of sites of the new factories established in 1933. In 90 of the 332 cases cited convenience of premises was the motive; 65 were chiefly influenced by the proximity to other factories in the same industry; 4 by branch factories; 35 by accessibility of raw materials; 35 by proximity to markets; 23 by suitability of labour; 14 by cheap land, low rent or low rates, and the remainder for various reasons, including six which had been transferred as part of the process of rationalisation.

The Size of the Factory.

In the design of a new factory or in an investigation into the earning power of an existing factory, one of the principal considerations would be the size of the factory. In all trades, and branches of each trade, there was an optimum size of factory at which the gain would be at a maximum. The optimum size would not necessarily be the same, as conditions changed, but for each set of existing conditions its deliberate determination should be possible within narrow limits. The highest economy of production per person did not necessarily result in the maximum gain to the company, for the former might be lessened by increasing the factory by an extra department, which, by augmenting the output, might increase the net gain. Conversely, where a certain number of staff on supervisory duties could efficiently look after a particular maximum number of similar producing units comprising a "block" of plant, it would be a matter for investigation of the particular conditions whether or not a greater gain would obtain by increasing the size of the works until conditions justified the addition of another complete "block" of plant. The days of the haphazard growth of factories without proper technical consideration had passed, and deliberate planning had become an economic necessity. One indication in particular which stood out prominently was the relative infrequency of the appearance of the factory of over 1,500 employees as the best size. Establishments of that size in the electrical, clothing and motor car industries gave good results, but in nearly all other industries the smaller firms had the best output per person. Of the 463 new factories established in Great Britain in 1933 over 90 per cent. of which used electricity as the sole motive power, the majority employed between 25 to 100 workers, and the average over the whole field was 64.

The Design of the Factory.

In the layout of a new factory or the reorganisation of an existing one, one of the main factors to be taken into account was the constantly changing design of product which took place and the steps necessary to anticipate the accommodation of such likely changes when they did occur. Another important factor which influenced the design of products and caused many changes was public taste. That affected the majority of all products from biscuits to furniture; in fact, it was easier to count up those products which were not so affected than those which were. It was estimated that only 15 per cent. of business in the U.S.A. was "necessity" business, the remainder being business affected by convenience and luxury, *i.e.*, dependent on the public taste. One of the noticeable features of present-day factory design was the severe simplicity of the layout consistent with high efficiency. Greater attention was given to the essential necessities of the plant and a clear line drawn between those and what might be called "superfluities." That simplicity became apparent to the eye because of the appearance of the interior of the modern factory. In the first place, unless it was absolutely necessary that it should be otherwise, the whole of the floor space would be open without any internal walls. With that arrangement the questions of the distribution and control of light and heat became relatively simple. Secondly, all service pipes, electric cables, etc., were carried in large sub-floor channels or alternatively supported by the roof. In the sub-floor channels would also be accommodated conveyors or other equipment, if required, for removing cuttings or other waste as well as oil, water, etc., from machines. By that means, the floor could be kept entirely free from waste material, and in a proper clean and dry condition, avoiding the necessity for any trucking of waste material over the floor. Another aspect was the question of the suitability of the layout from the point of view of convenience of operating, the grouping together of the units in such a manner that the maximum control could be exercised by the minimum number of supervisors, and the particular arrangement of individual machines so that operatives would have the physical and psychological conditions conducive to their best work individually and collectively.

Physical Conditions Within a Factory.

The regulations of the atmospheric conditions within a factory was a matter which in recent years had received a great deal of attention, and consequently the equipment for that purpose had been vastly improved. The conditions best suited to the highest efficiency of the machine operative and the machine itself depended on the type of factory and the factory location. Those conditions would range from the simple provision of warmth for the operatives during winter or cooling in summer to the invariable artificial conditions of temperature and humidity required in, say, a cigar factory in a temperate climate or a cotton spinning factory in the tropics. The matter of the gain in efficiecy of operatives or machines by providing the most suitable physical conditions was one which could be reduced to terms of money which could be directly compared with the cost of the necessary equipment. The atmospheric conditions might be accentuated by local conditions within the factory, such as from furnaces or by unavoidable prevalence of draughts in shops where one or more of the sides had to be open. Among other physical conditions which, when unsuitable, lowered the efficiency of the operatives, were the presence of dust, inadequate light, and excessive noise and vibration. In a simple case, say, of excessive heat in summer adversely affecting the operatives, a comparison could be made between the rate of the summer output and the winter output, or a comparison made of the earlier hours of the day with the later hours to ascertain to what extent the rate had decreased, or again to compare the degree of fineness of the work produced. The extent of those or other signs translated into terms of money would show the need or otherwise of providing suitable equipment for their correction.

SANITARY BUILDING SCIENCE.

The sixth edition of this book* has been carefully revised and brought up to date in the light of modern practice. It well maintains its position as a leading textbook for architects, surveyors and engineers, and is recommended also to medical officers of health, sanitary inspectors and students. The sections dealing with sewage disposal, heating and the uses of gas and electricity in relation to building have been rewritten, with fresh illustrations. A minor criticism is that the subject of "One-Pipe Systems," combining both waste and soil drainage in one down stack, is dismissed in a single paragraph. In view of the fact that there appears a considerable future for this system, under proper safeguards, and that the model by-laws of the Ministry of Health permit its adoption, this is an omission which doubtless in future editions will be rectified.

* "Architectural Hygiene: Sanitary Science as Applied to Buildings." Sir Banister Fletcher and Major H. Phillips Fletcher. (Pitman: 10s. 6d. net.)

GOOD HOUSING

CHADWICK PUBLIC LECTURE.

"Good Housing: The Basis of Individual and Social Health," was the title of a Chadwick public lecture given by Sir Raymond Unwin, P-P.R.I.B.A., on Friday, November 23, at the Royal Society of Arts, Adelphi. Sir William J. Collins, K.C.V.O., M.D., M.S., F.R.C.S., B.Sc., occupied the chair.

The lecturer said that the health of all the members, and the stability of society, depended on maintaining for all a certain standard of convenience, comfort and amenity in their homes; while, on the other hand, there seemed always to be found a lower-paid section of society who either could not afford, or did not sufficiently realise the need to afford, to pay enough for their houses to secure the provision of that needed standard by private enterprise. Hence the problem: the realisation of which had come upon the people of the U.S.A. with great vividness.

Society could not afford to let any members remain below a certain standard of home life; a section could not afford to induce private enterprise to provide that standard; to which problem there was only one complete solution. The community must frankly accept the duty of providing dwellings up to the desirable standard for those sections who could not provide them for themselves. That must be accepted as a public service, just as the provision of a pure water supply and a certain standard of education for all had been so accepted.

Once that position was frankly recognised the problem was much simplified. It was measurable in extent, could be tackled as a simple, straightforward productive enterprise. Even the lower-paid sections of the community could contribute substantially towards the cost of their dwellings. Many of them did already pay for a slum dwelling more than enough to find the low rate of interest on cost, sinking fund and repairs account, which alone were needful to leave the community free from loss on housing as a public service.

There were three classes to be provided for: (1) Those who could afford commercial prices or rents. For them private enterprise catered more or less satisfactorily; (2) Those who could not afford commercial rents but could afford the lower rents at which public credit and powers of organisation could supply the dwellings without any charge; (3) Those who through unemployment or poverty could not afford even these low rents. For those some subsidy or grant in aid of rent was required.

The larger the class (2) the smaller would be class (3). What were the best forms of aid for that class? If the amount needed to help class (3) be spread fairly over the better-paid sections, it would be little if any more than the undoubted savings in health services, police and such-like expenditures directly due to the continuance of the overcrowding and slum conditions, which would be completely removed, and could only be removed by that clear-cut policy of making the provision of a reasonable dwelling for every family a public service.

The lecture was illustrated by lantern slides.

THREE-BEDROOMED COTTAGES.

A third edition of "Three-Bedroomed Cottages" has just been published. It contains sixty designs selected from the three hundred submitted in the competition organised by the Building Centre for a pair of cottages which could be let at a rent not exceeding 10s. a week. It is understood that some 2,000 cottages to the winning design are to be, or have been, erected in various parts of the country as a result of this competition. The book, price 5s. 6d., post free, may be obtained from the publishers, 158, New Bond-street, W.1.

LAW REPORTS

KING'S BENCH DIVISION.

Before MR. JUSTICE MACKINNON.

ACTION BY ARCHITECT FOR FEES.

Frere v. Royal College of Surgeons of England.

This was an action by Mr. Eustace Corrie Frere, F.R.I.B.A., of Charterhouse, E.C., to recover from the Royal College of Surgeons of England £733, the balance of fees he alleged to be due to him for work done as architect during the years 1929-30-31 for the defendants or their agents, Lord Moynihan and Sir Arthur Keith, on the Buckston Browne Farm, Kent, and in connection with a scientific research institute which the defendants had contemplated building on a site adjoining Downe House, Kent (the home of the late Charles Robert Darwin, the distinguished scientist and author).

The plaintiff claimed £265 for work done in connection with Buckston Browne Farm; £292 16s. 6d. for work done in connection with the proposed research institute; and £175 for work in connection with the defendants' building in Lincoln's Inn Fields, W.C.

The defendants denied liability and alternatively pleaded that if plaintiff was employed in connection with the proposed venture it was on the basis that the total cost should not exceed £7,477 or thereabouts, for which a charge of £292 was made, and that plaintiff was not entitled to claim on any further sum, and defendants further pleaded that if the plaintiff did the work he claimed for, it was not done on the instructions given by Lord Moynihan or Sir Arthur Keith as defendants' agents, but in anticipation that if the scheme for a scientific research establishment at Downe House were proceeded with the plaintiff would be recommended to the building owners as their architect; but as the scheme, in fact, was not proceeded with, there were no building owners. Defendants admitted liability for £894, of which they had paid £800, and brought money into Court as being sufficient to satisfy any claim which the plaintiff might establish.

Mr. S. R. Sidebottom appeared for the plaintiff, and Mr. Singleton, K.C., and Mr. C. L. Henderson for the defendant College.

Mr. Sidebottom, in opening the plaintiff's case, said that the claim was in two main parts, the first being for fees in respect of work he did in regard to the research institute, and the second in regard to work he did in connection with the College premises in Lincoln's Inn. Mr. Frere had been in practice as an architect for 40 years, and had been so employed by the College for about 25 years, during which time no complaint was ever made about his work or his charges. He would get his instructions from the President of the College, or the Conservator, Sir Arthur Keith, or the Secretary. The whole of the scheme proposed was not proceeded with, but Mr. Frere was entitled to be paid what he claimed in connection with it. In 1927, Mr. Frere was asked to see the President of the College and Sir Arthur Keith, who informed him of the proposed scheme at Downe House, and other interviews followed, and in 1929 he received his instructions, being informed that the College would probably spend about £20,000 as part of the scheme, which would be capable of extension. Mr. Frere prepared plans which would cost about £17,000 to carry out, but finally the scheme was abandoned.

Mr. Frere gave evidence that the fees he had charged were in accordance with the scale of the R.I.B.A.

Cross-examined by Mr. Singleton, he denied that when the matter was first discussed with regard to the scheme he was told that it was a pure venture and that there was no money to pay any fees. He quite appreciated that Sir Arthur Keith did not want to spend more than £10,000, but the difficulty was that with the requirements the place could not be built for the money. It was obvious in April, 1931, that the estimate for £15,000 was going to be exceeded. He was told that Sir George Buckston Browne was putting down £50,000 and would provide £100,000 eventually. He knew that nothing could be arranged about the plans and buildings without the sanction of the Council or Committee. He did not know what figure they could go to, but he knew that they wanted something to be done for £15,000. The cost of what they wanted would run to £19,500, and directly they knew that they said they could not afford it.

Mr. Sydney Tatchell, F.R.I.B.A., gave evidence as to the Institute's scale of fees with reference to abandoned work, which had been revised in 1933. He explained that the new scale for work which was abandoned at the stage when the drawings were in sketch form was for payment to the architect on a *quantum meruit* basis instead of quarter of 6 per cent. as formerly.

At the close of the plaintiff's case Lord Moynihan gave evidence for the defendants. He said that he was President of the College from 1926 to 1932, and that he had no authority to engage Mr. Frere as architect and that he had not done so. In 1931 the scheme, which had never been taken up, was completely dropped. The utmost money hoped to be available for the building of the research establishment was £15,000, with a reservation of £2,000 for incidental items. Mr. Frere had no authority to do any work for the College which came in excess of that estimate. He had authority to give Mr. Frere instructions for work involving an expenditure of not more than £50. His (Lord Moynihan's) dream was to extend the activities in research. When the matter first came before the committee in January, 1931, they turned it down. It was his idea to get some generous donor to finance the scheme, but he had no authority from the Council of the College to engage Mr. Frere. Mr. Frere was told on the visit to Downe that the scheme was purely problematical. He had never seen the plans until they appeared in the *Morning Post*. Sir Arthur Keith had no authority to instruct Mr. Frere to prepare plans if he ever did so. That could only be done on the instructions either of the Council or the Museum Committee.

Sir Arthur Keith, examined, said that when he and Lord Moyniham had first discussed with Mr. Frere the proposed scheme of building a Research Institute, Mr. Frere was told that it was a purely private project and that it had nothing to do with the College or the Council, and that there was then no money available. Mr. Frere accepted that position and said he would do all he could to help the project. The question of fees was never discussed.

Cross-examined, Mr. Frere was as anxious to bring about the Institute as witness and Lord Moynihan were. He might have told Mr. Frere that the College were interested in the project. Had the efforts met with success Mr. Frere would have benefited, of course. Mr. Frere had never prepared plans for two schemes for Downe House on his instructions. What he did he did gratuitously. They were all working gratuitously. That was how medicine advanced.

Mr. S. F. Cowell, formerly Secretary to the College, and who retired this year, said that Mr. Frere had done work for the College since about 1907. He could only tell Mr. Frere to prepare plans on the instructions of the Council or Committee. Mr. Frere was aware of the practice that all instructions for work were only given after being sanctioned by the Council or Museum Committee.

Mr. John Douglas Scott, F.R.I.B.A., also gave evidence for the defendants on the plans which Mr. Frere had prepared.

His lordship, in giving judgment, said the dispute concerned the balance of fees which Mr. Frere alleged was due to him from the defendants, and these amounted to a sum of £733. The first item of claim was a sum of £265 11s. 9d., which Mr. Frere said he was entitled to for work done in connection with Downe House. Mr. Frere asserted that he was instructed to do that work by officers of the College—Lord Moynihan and Sir Arthur Keith. It was quite clear, said his lordship, that the College knew nothing about that matter, and if Lord Moynihan or Sir Arthur Keith did so employ Mr. Frere they did so without authority. No doubt Mr. Frere did work in respect of that matter, and whether he had any claim against somebody other than the College was a matter with which that Court was not concerned. On that item of claim he gave judgment for the defendants with costs. On the claim by Mr. Frere to be paid £292 16s. 6d. for work he did in connection with the research site adjoining Downe House he awarded him £50 with costs up to September 1, 1933, and on his claim for £175 for work he did in connection with the defendant's building in Lincoln's Inn Fields he (the Judge) awarded him £31 10s. with costs up to June 19, 1934.

The dates September 1, 1933, and June 19, 1934, were the dates upon which certain sums in excess of the amounts awarded to Mr. Frere were paid into Court by the defendants.

CHANCERY DIVISION.

Before MR. JUSTICE LUXMOORE.

TEST ACTION AS TO LEGALITY OF USE BY EMPLOYERS OF "EFFICIENCY EXPERTS."

Davies and Others v. Richard Johnson & Nephew, Ltd., and Another.

This action, which raised a question of considerable importance to employers of labour, was brought by Mr. Samuel Davies and four other workmen employed by the defendants, Messrs. Richard Johnson & Nephew, Ltd., wire manufacturers, of Manchester, for a declaration that it was an implied term of their contract of employment that the company would not hinder them in the performance of their contracts, and that while employed on piecework they were entitled to work free from any hindrance or other interference by their employers or by the representatives of Messrs. Charles E. Bedaux, Ltd., of Bush House, Aldwych, W.C., who were also made defendants to the action. This latter company were described by counsel for the plaintiffs as an American firm of "efficiency experts," who advised industrial companies and claimed to produce remarkable economies. The plaintiffs asked also for an injunction to restrain Richard Johnson & Nephew, Ltd., from breaking the contract of employment and to restrain the second defendants from causing or procuring the contracts to be broken.

Mr. D. N. Pritt, K.C., in support of the plaintiffs' case, submitted that it was an implied breach of their contract of employment that men—especially strangers—should be employed to watch them with handbooks and stop-watches and almost "breathe down their necks" while they were trying to do responsible work. He said that a workman could not carry on his work efficiently if his attention was distracted by someone standing, as it were, over his wrist as he moved.

His lordship said it did not matter whether the policy of employing efficiency experts was good or bad. One side said it was legal and the other that it was not. He had only to deal with the bare legal point.

Mr. Levi Wood, one of the plaintiffs, gave evidence that he lost about 1s. 8d. one day through an efficiency expert man watching him.

His lordship having heard the evidence of the other plaintiffs, in giving judgment said it was difficult to see where an employer not qualified for lunacy would desire to hinder a workman in his work. He was satisfied that what was done by way of observation was well within the legal rights of the employers, and that the effect of the observation was in each case grossly exaggerated in the witness box. In his opinion the action was wholly misconceived and would be dismissed with costs.

INQUIRY BUREAU

QUESTIONS.

Fumes from Painted Pipes.

SIR,—Are hot pipes which have at one time been painted with a gilt or brass paint likely to give off fumes which would cause headache and nausea to anyone sleeping in the room where the pipes are fixed?

M. A. E.

Damage through Repairs to Furniture.

SIR,—Have I any moral or legal right to compensation for damage done to furniture and floor coverings by plaster dust, and for inconvenience caused by ceilings bulging and cracking and having to be pulled down and replastered on two occasions within three months of taking over a new house? Manufacturers of plaster admitted liability for faulty plaster sent out and carried out the replastering. CEILINGS.

Access for Repair to Adjoining Property.

SIR,—We give below details of a knotty problem that we have been consulted upon, and up to the present have not been able to solve. Our client is the owner of a house, the side wall of which used to abut on to the side wall of the adjoining house that had been erected some time before our client's house. The adjoining house has now been demolished, and the vacant land forms part of the yard of a garage and filling station. The demolition of the house has exposed our client's wall, and as this is in a very rough condition and admits damp instructions were given to have the wall rendered in cement and sand, but the adjoining owners refuse to allow the work to be done from their yard, and this is the only means of having the work carried out. We shall be glad to hear if any of your readers have had a similar case, and if they know of any Act or law that compels the adjoining owner to give consent to the work being carried out *via* his yard. BEEGEE.

[Unless the exposed wall is a party wall, or there existed an easement of support by the house demolished, there is no right in law statute or otherwise to enter on the adjoining owner's land in order to effect repairs to the wall now exposed. To enter on the land is trespass, and the adjoining owner can remove the trespasser. The only way is for "Beegee" to try and arrange terms with the adjoining owner to allow the entry on his land.—ED.]

Reed Thatching and Incombustibility.

SIR,—I am building a house in a Surrey district, and bye-laws state that the house must be roofed with incombustible materials. Have there been any legal decisions concerning Norfolk reed thatching where this has been treated with fireproofing? Could it be considered incombustible to the true intent and meaning when tests have shown that it will *not burn* when so treated. I should be more than grateful for any information that you could give me, or particulars of where I could obtain a more or less legal ruling.

L. F. J.

[Thatching has been permitted in many localities in Surrey, but, in general, by-laws of local authorities do not permit of thatching being used as a roof covering. It is doubted if it can be said to be incombustible, even if "treated with fireproofing," and, if the by-laws of the local authority of the district where the house is being built will not permit of it being used, and insist on some well-known form of incombustible covering, it will be unwise to proceed to thatch the house. "L. F. J." can, of course, test the issue by thatching and taking the consequences of, and defending any action the local authority may take on its being done for contravening the by-laws. It would be well to agree with the local authority before venturing on this. There are no legal rulings on the matter.—ED.]

Screeding on Concrete Floor: Disintegration.

SIR,—About 60 yards of 1 in. sand and cement screed was laid on an ordinary finish concrete floor of a basement in London by a man of many years' experience in this class of work. Within eight weeks a large portion of the screed has come away from the concrete foundation and has since cracked. Good sand and cement were used and the concrete thoroughly wetted before screeding. Can you please suggest any cause of this trouble? The basement is dry, the walls and ceiling are plastered, and the building is not more than 18 months old. Your opinion on this matter would be much appreciated. QUIZ.

New Roads on Building Estates.

SIR,—Can a local authority, in laying out its own housing estates, put down carriageways of less widths than those called for in its own by-laws? If local authorities have to obtain the Ministry of Health's permission to do this, can private individuals obtain the same authority on application to the Ministry? ESTATE AGENTS.

Cure for Crickets Wanted.

SIR,—Could any of your readers tell me how to destroy crickets? I have a new house, and these insects are at the back of the wooden surround of my dining-room fireplace.

LEG THEORY.

ANSWERS.

Crumbling of Stonework.

[ANSWERS TO "R. S. T.," NOVEMBER 23.]

SIR,—The most probable cause of the crumbling is impurities in the atmosphere, which result in chemical action and the crumbling mentioned. This trouble can be overcome by washing down the ornaments and then giving them a coat of some stone paint or waterproofing solution. If paint is used, its colour must be the same, or nearly the same, as the ornament to which applied. Complete protection from the atmosphere will be given. W. E. W.

SIR,—Coating with two or three coats of an approved petrifying liquid may arrest the decay in the stonework, unless this has developed very deeply into the material. In the latter case, cutting out of defective stones and their replacement and fresh carving of new is the only suitable remedy. The choice of stone in such a case should be carefully made to suit the district and local conditions, and should be accompanied by a maker's guarantee. MASON.

SIR,—Thoroughly wash and remove all particles, then leave until there is a spell of hot weather next summer. At that time brush and treat with colourless stone preservative to makers' instructions. SEASON.

Corrosion of Lead Piping.

[ANSWERS TO "BURGO," NOVEMBER 23.]

SIR,—It is evident that lead piping is not suitable for the chemical condition of the local water, and its replacement by a material recommended by the local water authority, possibly copper or galvanised iron, seems to be the only cure for the trouble. The occasion does arise when new wells are sunk by the authority of which the water differs in chemical composition from that previously issued, so that it is no proof that my suggestion is not the right one if the use of lead has been general in the district without trouble.

PLUMB.

SIR,—There seems little doubt that the pipe is suffering from contact with new plaster. If it is possible to submit a small sample of the corroded pipe I shall be able to determine the nature of the corrosion, and in all probability give information as to how it can be prevented. KENNETH GRAY.

Translucent Glass.

[ANSWER TO "WINDOW," NOVEMBER 16.]

SIR,—Glass answering to the description given by "Window" has been noted in the doors of old cabinets, and occasionally in lead lights. The principal manufacturers have technical departments glad to advise.

CLEAR.

Architect's Claim for Fees.

[ANSWERS TO "UNCERTAIN," NOVEMBER 30.]

SIR,—"Uncertain" is entitled to charge what is reasonable and nothing more.

No architect, be he registered or a member of the R.I.B.A., can base his charges on any well-known scale of charges, unless he can show that these charges were expressly or implicity agreed upon by the parties concerned.

LEX.

SIR,—Neither the R.I.B.A. nor the Architects' Register denies the right of any architect to recover fees due to him. The position of an architect who is either legally registered or a member of the Institute practising under its scale of charges, is, of course, more clear than one unattached. In the latter case, however, a charge based on the custom of the district or on a "quantum meruit" basis for work efficiently done, would certainly be upheld in court. PRACTICE.

SIR,—If your correspondent anticipates that his charges are in this instance likely to be challenged, his position as an architect neither registered nor attached, is not an enviable one. That he seeks advice on the matter seems to indicate but recent entry into independent practice, for an old stager would have taken care to come to some agreement as to fees at the outset. All that "Uncertain" can do is to make every effort to avoid a dispute, even if this should require of him some sacrifice, and take care in the future that he is not placed in a similar position of difficulty. In all probability he cannot now hope to obtain anything approaching to scale fees. Q. S.

Chalk as a Building Material.

[ANSWERS TO "BUILDER," NOVEMBER 30.]

SIR,—Chalk is used for building purposes in all those districts where it is easily obtained. Chalk, to be satisfactory for this purpose, must not be porous; it must also be free from any foreign matter which it is always liable to contain if taken from too near the earth surface. As far as I know, experience is the only guide in selecting it. Provided the chalk is solid and is not crumbly it can be safely used for buildings which have not to support a great weight and will not be exposed to severe conditions. It is desirable that the chalk used should be freshly quarried. W. E. W.

SIR,—The weathering properties of building chalk depend very much upon the depth of the bed. Deep and therefore heavily compressed strata provide a stone of excellent weathering properties, capable of maintaining the finest mouldings and arrises. In most districts, however, these beds have been fairly well worked out in most accessible places, and it is the small pits nearer the surface which are generally available.

STONE.

Hot Water Pipes for Towel Rail.

[ANSWERS TO "E. M.," NOVEMBER 30.]

SIR,—The return pipe from the towel rail should be carried back straight to the boiler, if necessary, dipping under the floor, assuming that there is sufficient head in the circulation. The boiler, cylinder and primary circulation can be looked upon as one hot water unit in which the circulation can be maintained by rising out of the highest part and returning to the lowest. CALOR.

SIR,—This question cannot be properly answered without full information as to the disposition of the fittings, with special reference to relative heights. If it is desired that the towel rail should give off continuous heat, and so be used for drying towels, the fitment should be on a secondary circuit. But if it will be sufficient to merely heat the rail temporarily, so that towels are aired and warmed, it may be so arranged that hot water passes through it when the bath is filled. Any competent plumber will be able to advise "E. M." after making an inspection.

X. R. E.

THE BUILDING TRADE

MORE ESSAYS ON BUILDING SUBJECTS—XXIII

By J. R. TAYLOR.

SOME TRADITIONAL METHODS—I.

THOUGH the scientist and research worker have done so much valuable work, it is probably true to say that the builder is still, in the main, more reliant on tradition than on exact science. It may be that the future lies in the hands of the technical training centre, and that at some distant date the builder will have to hold a degree before being permitted to build, but that time is not yet. At present he is generally a product of the apprenticeship system, which implies that he learns more by watching and imitating the methods of others than by the study of books. But there is a marked tendency towards devoting a greater amount of time to study of the theoretical side, and, to the writer, it seems a great pity that much of the most authoritative and valuable information available is put forward in such a manner as not to be understandable by those who have not taken degrees in science. One result of this is that we sometimes cling to traditional methods long after they have been, or, rather, should have been, replaced by others having a better basis of ascertained scientific fact. Indeed, there would be grounds for accusing us of ingratitude were this not the case, for a very old maxim enjoins us to "speak well of the bridge that has carried us safely over." It is also true that some of the newer methods have their dangers, particularly when their proper application demands some amount of special training. It is not, however, with the broad aspects of this subject that we are especially concerned. Our present purpose is to examine some of the methods not so commonly used now as in former times.

Uses of Cow-Dung.

A clause that still makes its way into the pages of specifications, but to which, as far as the writer can discover, no one pays any attention, is that which requires of the builder that he should parget the flues to fireplaces with cow-dung. Usually the proportion is not mentioned, but "Specifications in Detail" (fourth edition, 1930), puts it at one part of cow-dung to four of hair mortar. The object of pargetting is to smooth the inside of the flue for the easier passage of smoke, and to some extent to prevent the escape of it through joints. At first it was probably mainly used on stonework, and without the admixture of lime and hair. But cow-dung has water-resisting qualities, and was at one time used as external plastering to old stone buildings in remote places in the hills, mixed with chalk and/or clay. In a similar manner it was used to form the clay floors on which corn was threshed. These things were related to the writer many years ago by a builder who at that time was a very old man. He stated that as a lad he and others had to "pather about" in bare feet for many hours at a stretch when making these threshing floors, and that his father enjoyed local fame as being very skilled at obtaining good results from his "mixings," doubtless a derivative from mixen—a dung heap.

Another purpose to which cow-dung was put was that of darkening oak, when old work had to be matched in repair, and sometimes when a new complete article, such as a gate, had to be made to look old. The oak was put into the manure heap, and covered up, or put into a liquid manure tank. In this case it would be the ammonia which operated to darken the wood. The writer has seen these methods employed, but it was not until recently that he heard of still other uses for cow-dung. He was watching a village wheelwright driving the spokes into the nave or hub of a cart wheel, and noted that the ends were dipped into a bucket of what proved to be fresh cow-dung. The wheelwright stated that he used it in all the joints, as it prevented water getting in and causing movement. He said that his father, grandfather and great-grandfather had all used the same method, and that his father had also used it in connection with timber-framed buildings.

Plaster Laths.

The old specifications sometimes demanded oak plastering laths, but more usually that they should be "rent out of the heart of the best red Baltic fir, and be free from sap and knots." Very rarely was the letter of this obeyed in practice, for a triangular piece containing the heart was usually put on one side as unsuitable and cut up for firewood. It is claimed for rent laths that they are stronger than sawn laths of the same content, and so they are. But the real reason for rending or splitting them out was that it was the only practicable method when nearly all sawing had to be done by hand. But apart from the question of strength, the rent lath certainly has the advantage of presenting a less amount of end grain to a wet material. This, in the writer's opinion, is a matter of not inconsiderable importance, for it must lessen the risk of breakage of the plastering keys by reason of movement set up by moisture. When sawn laths were introduced they were looked upon by architect and builder alike with a good deal of suspicion, and the great increase in the number of plastering failures that has coincided with their general use does at least seem to warrant further inquiry. The men who split out these laths were not infrequently engaged as sub-contractors to do the lath work only, the plasterer following them up. Between them they got correct spacing, for both were paid by measure, and neither wished to use up more material than was necessary. At one time in some districts plastering laths were used to hold up "tiering" or "torching" mortar to the underside of slates. Sometimes they were nailed to the underside of the slating battens in the same direction as the rafters, and the haired mortar was applied to the underside. This method was employed where part of the roof slope formed the ceilings of bedrooms.

By another method the laths were nailed on the top of the rafters between the battens, and the mortar was placed as a bedding to the slates. The last job the writer saw carried out in this manner was completed in 1924. The slates used were random rustics of a rugged character, and because of considerable variation in thickness they tended to "ride" in places, but this was overcome by the bedding. On a recent inspection the roof space was quite dark—no pencil or glimmer of light appearing anywhere, and there was no evidence of penetration of moisture, which, when coming through in very small quantities often leaves streaks on the side of the rafters.

Clay.

Unbaked but tempered clay has, of course, played a part in building construction from the earliest times, but it is very little used now. Forty years ago it was much used in the effort to exclude damp from cellars and basements, and some architects specified that it should be puddled and rammed around the foundation walls of buildings that had no cellars. Others, where the foundations were cut into clay, specified that the trenches should be filled with rough rubble, and, where the site permitted, laid land drains to carry away the water from them. But with the coming into general use of the horizontal dampcourse, such additional precautions as these are seldom taken. Clay was also used to join drain pipes, and in some districts still finds favour. Sometimes the joints are half filled with tempered clay, and finished off in cement. Though they will stand up under the water test when so made, the practice is not to be recommended.

A few weeks ago a very old thatched cottage had its roof destroyed by fire. At one time there were two cottages, but they had been made into one. The one-time party wall at first-floor level consisted of the upper portion of a crutch principal filled in with bricks and plastered with clay. The clay in one part appeared to have been reinforced with very fine twigs, but in others with cut straw. Above the ceiling collars it was in excellent condition. Of course, no one would think of using clay for such a purpose now, though it has occasionally been attempted, with poor results, in an effort to repair external panels in half-timber work.

There are, of course, many other uses to which tempered clay has been put, and some of the old books dealing with this subject are very interesting and occasionally throw a light on the origin of modern methods, but they cannot now be suitably dealt with for want of knowledge at first hand. It may, however, be said that many curious ingredients have been mixed with clay in an effort to retain the pliability that comes with tempering, and that clay is still often used as mortar in connection with agricultural buildings. Some of the farm hands who occupy themselves in repair work between seasons do quite passable work with it.

Timber Preservatives.

It is not so very long ago that nearly all specifications dealing with timber set in the soil called for charring and tarring. Many have cast doubts on the value of this treatment, and certainly it is not as efficacious as impregnating the timber with preservative introduced under pressure, but in certain circumstances it still has its uses. Fencing timbers and gate posts are often cut out of branches or small trunks of little girth. Often they are sawn down the middle and then the other three sides are sawn down only to the distance they will project above ground, leaving a half-round butt-end to go into the soil. This practice tends to easier and firmer fixing. The butt-end necessarily carries a large amount of sap wood, which is just the sort of food that attracts insects. The object of charring is to bite deeply into this sap wood, so as to make it receptive and retentive of tar and its oils. Charring and tarring is a process that certainly tends to check the decay of timber posts so treated, and there are in existence barns with roofs supported on roughly-hewn tree trunks, with butt-ends that have been so dealt with and have stood so long that nobody remembers their being put up. We must not, however, be understood to be advocating this method in preference to those that are better. But often the sole choice lies between so treating the timber or leaving it untreated when the butts are left on. The before-mentioned wheelwright did, however, state that for this purpose, also, he used cow-dung, and there are some who advocate the standing of the charred ends in tubs of lime for a length of time before the posts are fixed.

In connection with the use of timber for posts, a very interesting account of the relative durability of young oak and young chestnut is to be found in "The Transactions of the Society of Arts" for 1789. It is related that posts of chestnut and others of oak had been put down before 1745. About 1763 the oak posts were found to be so decayed that they had to be replaced, whereas the chestnut posts were in good condition. Accordingly, the oak posts were replaced by others, and the chestnut posts allowed to remain. Twenty-five years later the chestnut posts were in much better condition than the oak, although the chestnut had been twice as long in the ground. The "Transactions" give other examples, and the conclusion arrived at was:—"It would seem, therefore, that young chestnut is superior to young oak for all manner of woodwork that has to be partly underground." Old chestnut is, however, liable to internal decay, as has been noted in half-timber work where both oak and chestnut have been employed in the same framings.

(To be continued.)

CONFERENCE FOR BUILDING TEACHERS

THE first of a series of conferences for building teachers and others interested in building was held by the Yorkshire Educational Association for the Building Industry at the Department of Building, College of Technology, Roseville-road, Leeds, on Saturday, November 24. About 85 members and others were present. Mr. W. H. Forsdike, F.I.O.B., of Sheffield, President of the Association, stressed the importance of the work which the Association was doing in fostering a spirit of co-operation between educational bodies, building students, and the industry. He then introduced Mr. Livett, A.R.I.B.A., Director of Housing for Leeds, who opened the Conference.

Mr. Livett said that the day of the specialist in building had arrived. The Slum Clearance Act, which he believed would shortly become law, would revolutionise the building industry. It was estimated that throughout the country 256,861 houses would be demolished and 1,240,182 persons would be rehoused in 285,189 houses. In Leeds 120,000 people would be rehoused in 30,000 houses, and this would mean the steady employment of 3,000 men and the manufacture of 75,000,000 bricks and 18,000,000 tiles a year, and the construction of 115 miles of fencing and 15 miles of new roads, apart from the provision of schools, churches, amusement halls, etc. The speaker also stressed the importance of planning, and paid particular attention to road construction.

He disagreed with standardisation of window and door fittings on account of monotony, while standardised staircases restricted planning. Internal fittings, such as wash boilers, cisterns and electrical equipment, could be readily standardised. He believed that the brick and tile cottage construction was the best and most economical for its purpose, and that the cut sand-faced brick was a much better brick for housing schemes than the pressed brick. The back-to-back range was excellent for heating the living-room, the back boiler and an oven accessible from the scullery. Timber held its own for carcase work, but other composite materials were now being used. Timber was, however, liable to harbour bugs and beetles, and considerable sums were spent each year in fighting those pests.

Mr. J. A. Fletcher, F.R.I.B.A., the City Architect of Bradford, spoke about the future of the building industry, and referred to the large programmes in housing which our public authorities would be called upon to undertake in the near future. The first report of the Council for Research on Slum Clearance and Housing predicted, he said, a possible expenditure of £150,000,000. Housing work of such magnitude would necessitate the close attention of the building industry to organisation and specialisation to a far greater degree than at present obtained if the schemes which were now being planned were to be "speeded up." With the provision of houses on large areas, there would arise a need for other buildings, such as schools, libraries, baths, recreation hall, and, possibly, a gymnasium, with day nurseries for the children of working parents. These would become increasingly necessary with the almost certain advent of increased leisure which was a possibility within the near future.

At the close of the conference the Association passed a hearty vote of thanks to all those who had contributed to its success, especially to Mr. Livett and to Mr. Fletcher. A visit was paid to the Leeds Corporation exhibition houses in the Headrow, Leeds.

The next conference of the Association will be held at the Technical College, Bradford, on Saturday, February 2, 1935. The subject for the conference will be "Science and the New Building Materials." The conference will be opened by Dr. R. E. Stradling, Director of Building Research. Information regarding the activities of the Association can be obtained from the Hon. Secretary, Mr. J. B. M. Hay, Department of Civil Engineering and Building, The Technical College, Bradford.

BUILDING SCHEMES AND RESTRICTIVE COVENANTS

THE case of Pearce *v.* Maryon-Wilson, which we reported in our columns on November 16, and which is also reported in *Weekly Notes*, December 1, is of importance because it calls attention to a point that may be overlooked by those entering into leases on estates laid out under what they deem to be "building schemes."

The plaintiff was the lessee of a dwelling-house on an estate of which the defendant was the owner of the freehold and the lessor under building agreements of a number of houses which had been erected on the estate under leases which all contained a covenant by the lessee not to use the premises for certain specified purposes, or otherwise than as private dwelling-houses, but which also contained the following qualification: "Without the consent in writing of the said lessor having first been obtained."

The action was brought by the plaintiff claiming an injunction to restrain the defendant from permitting any purchaser or lessee deriving title from him, or his predecessors in title, of any plot on the estate from using any premises thereon erected, otherwise than as a separate dwelling-house or so as to effect any departure from the character of the dwelling-houses so erected. For the purpose of our present observations it is unnecessary to set out the facts in detail because the Court intimated that for the purpose of determining the real question in this case, *i.e.*, what was the effect of the limitation contained in the leases as to a variation by consent, the Court would assume as facts matters which were in dispute between the parties. These assumptions were: (1) that there was a building scheme which affected the defendant's property; (2) that the covenants affecting the property comprised in that estate were binding on the persons who were lessees of the estate; and (3) that the release of those covenants would injuriously affect the plaintiff and other lessees of property on the estate. These assumptions, it will be seen, cover most of the points usually raised in issue in such cases, and there was a further assumption that all the leases were substantially in the same form. The sole question, therefore, was: Is the owner of a building estate, the subject of a building scheme constituted by the relationship of lessor and lessee, and under which the owner was the lessor of the various properties, entitled to relax or remit the covenants in respect of several parts of the estate comprised in the building scheme so as substantially to depreciate the value of the other parts of the estate comprised in the scheme?

The Court held that the words "without the consent in writing of the said lessor having been first obtained" were in the widest form possible and their *prima facie* meaning must confer on the lessor an unlimited power of giving or withholding his consent, and although it had been argued that having regard to the fact that there was a building scheme in existence some limitation must be placed on the generality of those words, yet it appeared to the Court that the very fact that there was a building scheme required the presence of those words if the lessor required power to authorise any departure from the building scheme, and there was no authority to which the Court had been referred which suggested that in a lease of this kind those words should be construed in anything but their ordinary and *prima facie* meaning, as conferring an absolute power to give or withhold his consent.

But, although this case shows that covenants with such a dispensing power vested in the original owner or lessor can be exercised by him and he cannot be restrained in its exercise, we think it may be said that it would not necessarily follow that the reservation of such a power would deprive the lessees of the power of enforcing the covenants as between one another, for in the case Elliston *v.* Reacher (1908, 2 Ch. 665) it was held that notwithstanding a dispensing power being reserved to the vendor, where there is a building scheme for the benefit of the purchasers *inter se* as well as for that of the vendor, the covenants could be enforced as between the lessees. The dispensing power in that case related to parts of the estate not disposed of when the building scheme was prepared.

BUILDERS' FOREMEN AT DINNER

THE annual dinner of the London Association of Builders' Foremen and Clerks of Works was held on Saturday, December 1, at Princes Galleries, Piccadilly, under the chairmanship of Mr. F. L. Griggs, F.I.O.B. Amongst the large gathering present were Messrs. T. P. Bennett, C. H. Rushton, F. Denning, E. C. P. Thomas; Messrs. Holt and Wheeler, trustees, and members of the firms of Messrs. Allen, Fortescue, Messrs. Theobald and Gardner, Messrs. Leaning and Son, and Mr. G. H. White, secretary.

After the loyal toasts, the Chairman proposed the toast of the Association. He said they had met to give a helping hand to those who had fallen by the wayside. The organisation was formed in 1894, and had since developed very considerably, until to-day it numbered over 320 members. At the present moment the pension fund was paying out £772 per annum. The building trade were conscious of the debt they owed to the foremen and clerks of works; they were always ready with practical suggestions in all difficulties. They gave of their best, and it was "up to" them to support them when they were unable to support themselves. He then paid further tributes to the high qualifications of the foremen and clerks of works. Speaking about the committee of the Association, he said he congratulated them on their secretary, Mr. G. H. White, who had fifteen years' service.

Responding to the toast, the president (Mr. E. G. Harwood) thanked the Chairman for his remarks. They, as clerks of works and general foremen, knew that at times on their job they were a help to the architect, surveyor, builder and sub-contractor, and he knew in return that the Association was grateful for what those gentlemen had done for them. He concluded by thanking all those who had helped the Association's pension fund.

In proposing the toast of "The Architects, Surveyors and Builders," Mr. H. A. Rundle said no words of his could convey more than a fleeting glimpse of their splendid achievement through the past ages, still less of the future triumphs they had in store in that wonderful and fascinating craft of mankind.

Mr. Laurence A. Gotch, F.R.I.B.A., replying, said without the foremen and clerks of works, architects and surveyors would not be in the position they were to-day, and he felt sure they owed them a great debt. Referring to modern materials, he said if they were used properly they could be as effective as other materials.

Major L. Shingleton, who also responded, said they always welcomed the assistance they got from foremen and clerks of works, and he felt the master builders relied on them more and more to make a success of the contracts they undertook. The general foreman of to-day had to be an exceptional man; the knowledge and tact that he must possess would, in his opinion, ensure his success in any walk in life.

The toast of "The Visitors" was proposed by Mr. J. Chalmers, vice-president of the Association, and responded to by Sir Duncan Watson.

The toast of "The Chairman" was proposed by the president of the Association, who said they were told that if Mr. F. L. Griggs took the chair he would see the job through, and, to judge by the numbers present, he had. He then presented the chairman with a life membership certificate.

The Chairman briefly replied.

The amount collected was about £260.

NEW BUILDINGS IN LONDON

The Editor would be glad to receive information for publication under this heading from architects, builders, or other persons concerned. Items should be received at THE BUILDER *Office not later than Wednesday morning.*

ACTON.—FACTORY.—The tender of Messrs. L. and W. Whitehead, Ltd., 169, Clapham-road, Stockwell, S.W., has been accepted for the factory in Atlas-road, W.3, for Messrs. T. Wall and Sons, Ltd., Friary, W.3. The plans have been prepared by Mr. J. L. Simpson, architect to Messrs. Unilever, Ltd., Unilever House, Blackfriars, E.C.4.

ACTON.—FACTORIES.—Work has started on three new factories. They are works and offices for the Ultra Electric Co., Ltd., wireless manufacturers, to be built in Western-avenue, North Acton; new works for Messrs. S. Wolf and Co., Ltd., electrical tool manufacturers, at Ealing-road, Alperton; and Messrs. Pritchard and Burton's tobacco factory, in Victoria-road, Acton. Messrs. Pritchard and Burton's factory has been designed by Messrs. Chamberlain and Willows, Moorgate, E.C., and the builders are the Commercial Structures, Ltd. The Wolf factory has been planned by Mr. R. A. Baker, of Messrs. Percy Bilton and Co., Ltd., the builders.

BANSTEAD.—SCHOOL.—The Surrey E.C. has approved an estimate of £15,830 for erection of a central council school.

BECONTREE.—CHURCH.—The Bishop of Chelmsford's Appeal for Essex Churches and Schools Committee have placed a contract with Messrs. W. H. Gaze and Sons, Ltd., High-street, Kingston-on-Thames, for a new church of St. George's, costing about £5,700. The plans have been prepared by Messrs. Milner and Craze, 5, Racquet-court, Fleet-street, E.C.4.

BERMONDSEY. — EXTENSION. — Messrs. Joseph, 2, Paul's Bakehouse-court, E.C.4, are the architects for Messrs. Crosse and Blackwell, Ltd., 20, Soho-square, W.1, for extension to the factory in Crimscott-street.

BERMONDSEY. — OFFICES. — Mr. F. J. Broad, 205, High Holborn, W.C.1, has submitted to the B.C. plans on behalf of Messrs. Pickfords, Ltd., for a new loading platform, warehouse, offices, etc., at their Bricklayers' Arms Goods Station, Pages Walk.

BOW.—REMODELLING.—The L.C.C. has recommended £1,475 in respect of the remodelling of the operating theatre suite, enclosing bridges between certain wards and the provision of a verandah to a ward at St. Andrew's Hospital.

BRENTFORD.—EXTENSIONS.—To the factory of the Firestone Tyre and Rubber Co., Ltd., on the Great West-road, are about to commence. The tender of Messrs. Grays Ferro-Concrete Co., Ltd., St. Vincent-street, Glasgow, has been accepted. The plans have been prepared by Messrs. Dodge and Reid, 72, High-road, Brentford.

CARSHALTON. — SCHOOLS. — The Surrey E.C. have accepted the tender of the Ashford Builders' Co., Ltd., 3, Bloomsbury-place, W.C.1, amounting to £13,217, for a new infants' school and the addition of a hall to the existing junior school; and £2,910, less an allowance of £25 for old materials, for the addition of halls to the junior mixed and infants' departments of the St. Helier Nos. 6 and 7 schools.

CATFORD.—BUILDING.—Mr. L. A. Cullifford, 58, Theobalds-road, W.C.1, is the architect for the layout of the Manor estate, Catford Southend. Messrs. Brett and Son, surveyors, 353, Norwood-road, S.E.27, also prepared a lay-out of a site at Perry Hill, Catford.

DARTFORD. — EXTENSIONS. — The R.D.C. have received a letter from the Dartford Joint Hospital Committee stating that in consequence of continued pressure on the existing accommodation for cases of infectious disease at the Hospital, Bow Arrow-lane, the Committee are considering the question of providing additional accommodation. Plans have been prepared and a scheme generally approved. The approximate cost of the scheme is about £50,000.

EAST HAM.—EXTENSIONS.—The Borough Engineer is to submit plans and suggestions to the T.C. for further office accommodation at the Police Court.

EAST HAM.—HOUSES.—The Town Clerk of the T.C. has received a letter from Mr. John Silley stating that as the Port of London Authority has definitely decided to take over the greater part of the land in Beckton-road for a housing scheme for aged employees in the shipbuilding and ship repairing industries, about twenty to thirty houses will be erected.

ELTHAM.—SHOPS.—Messrs. George Trollope and Son, 13, Hobart-place, S.W.1, have sold a site in the High-street for the erection of a block of shops, with flats in the upper floors.

ESHER.—SCHOOL.—The Surrey C.C. propose to proceed with the erection of a mixed central school for 360 children instead of two departments for 360 children each, as originally intended. The E.C.'s architects are Messrs. Jarvis & Richards, 8a, Lower Grosvenor-place, S.W.1.

ESHER.—SHOPS.—With flats above are to be erected in the Portsmouth-road to the plans of Mr. H. W. Binns, F.S.I., 23, Bloomsbury-square, W.C.1. The contract has been placed with Messrs. Haymills, Ltd., The Avenue, Wembley, Middlesex.

FULHAM.—FLATS.—Mr. W. B. Binnie, F.R.I.B.A., 26, Old Queen-street, S.W.1, has prepared plans for a block of flats at Nos. 5-15, Edith-villas. No contracts have been placed yet.

FULHAM.—REBUILDING.—Plans have been prepared by Mr. H. J. White, 407, Holloway-road, N.7, for the rebuilding of premises at Beaufort-mews, W. No contracts have been placed yet.

GOLDERS GREEN.—FLATS.—A site in Finchley-road, Temple Fortune, N.W., is to be developed by the erection of several blocks of high-class flats. The builder is Mr. B. A. T. Hammond, 8, Spring-gardens, S.W.1. The plans have been prepared by Mr. John C. S. Soutar, F.R.I.B.A., "Wyldes," North End, Finchley, N.W.3.

HOUNSLOW.— ADDITIONS. — Including a new tower, are to be made to the Church of St. Stephen's. Contracts have not yet been placed. The architects are Messrs. Welch, Cachemaille-Day and Lander, 8, Gloucester-place, W.1.

KINGSBURY.—SCHOOL.—The tenders of Messrs. Wm. Harbrow, Ltd., 214, Rotherhithe New-road, S.E.16, has been recommended at £2,219 for acceptance for a temporary school in Cotman-gardens, Aerodrome estate, Stag-lane. Mr. W. T. Curtis, F.R.I.B.A., is the County Architect.

LAMBETH.—ALTERATIONS. — Are to be made at the "Southampton Arms" public-house, 21, Nine Elms-lane. Mr. W. F. Foster, F.R.I.B.A., 45, Nine Elms-lane, S.W.8, is the architect.

LAMBETH.—FACTORY.—Mr. E. W. Wallis, 395, Norwood-road, S.E.27, is the architect for a new factory building at the rear of 67, Effra-road.

LEA BRIDGE-ROAD.—OFFICES.—Work has just commenced on the erection of a large factory and block of offices at the Lea Bridge factory estate for Messrs. Gilder and Monnick. The general contractors are Messrs. Commercial Structures, Ltd., of 38-44, Canal-road, N.1.

LEE. — FLATS. — Messrs. Marshall and Tweedy, 4, Cavendish-place, W.1, are the architects for shops and flats upon a site on western side of Burnt Ash Hill, Lee, abutting upon Kingsand-road.

LEWISHAM.—BUILDING.—The tuberculosis dispensary and maternity and child welfare clinic to be erected on the Priory site, High-street, has been approved at £14,247 by the B.C.

LEWISHAM.—HOUSES. — Messrs. H. F. Thoburn, Ltd., Kent House Station, Beckenham, are the architects and surveyors for 41 houses on the north eastern side of Marvels-lane. The New Ideal Homesteads, Ltd., are to build 44 houses in Selworthy-road and four houses in Winsford-road, while Messrs. Wates (Streatham), Ltd., are to build 152 houses in new road out of Whitefoot-lane, and 24 houses in Whitefoot-lane. All these schemes have been sanctioned by the T.C.

LEYTON.—ALTERATIONS.—Are being made to 469-471, High-road, Leytonstone, by Messrs. Alfred Cox and Co., builders, 118, South Birkbeck-road, E.11.

LEYTON.—EXTENSIONS.—Are being made to the factory of Messrs. D. Smith and Sons, Ltd., 97, Lea Bridge-road, Leyton, E.10. Mr. H. V. Kerr, F.R.I.B.A., 22, Old-buildings, Lincoln's Inn, W.C.2, is the architect. All contracts have been settled.

LEYTONSTONE.—CLINIC.—The T.C. has approved the tender of Messrs. W. J. Cearns, Ltd., Carpenter's-road, Stratford, E.15, for the erection of Granleigh-road clinic. The price is £4,316.

MAIDA VALE. — RESIDENCES. — Messrs. Bovis, Ltd., 35, High-street, W.1, are to build three large residences in Hamilton-terrace, N.W., to the plans of Mr. H. W. Binns, F.S.I., 23, Bloomsbury-square, W.C.1.

MALDEN.—SCHOOL.—The Surrey E.C. have decided to provide a school for 384 junior mixed infants on the site which has been acquired in Sheephouse-lane. The committee's architects are Messrs. Jarvis and Richards, 8a, Lower Grosvenor-place, S.W.1.

MARYLEBONE.—FLATS.—A big block of flats is proposed on an island site behind Holy Trinity Church. The Commissioners of Crown Lands have granted Sir Lindsay Parkinson and Co., Ltd., builders and contractors, 171, Shaftesbury-avenue, W.C.2, lease of the site, which is of some 56,000 sq. ft., bounded by Albany-street, Osnaburgh-terrace, Osnaburgh-street, and Longford-street. A building containing 800 flats is to be erected there at a cost of about £400,000.

MARYLEBONE.—FLATS.— The Prudential Assurance Co., Ltd., Holborn Bars, E.C.1, have placed a contract with Messrs. Humphreys, Ltd., Knightsbridge, S.W.1, for a large block of flats on the site of Nos. 39-57, Seymour-place, 11-16, Upper George-street, and 20-28, Stourcliffe-street. The demolition and excavation works are to be executed by Messrs. H. Sabey and Co., Ltd., South Wharf, Paddington Basin, W.2. The plans have been prepared by the building owners' architect.

NORWOOD. — BUILDING. — Mr. E. R. Taylor, A.R.I.B.A., 5, Manchester-square, W.1, has laid out a new building line at 280-282, Norwood-road, abutting upon York-road.

ROMFORD.—HOUSES.—Estate lay-out and plans for 132 houses are being prepared, and tenders will shortly be invited. The architect is Mr. A. G. Millns, A.I.A.A., 120, North-street, Romford.

SANDERSTEAD. —HOSPITAL.—In response to an inquiry made by the Coulsdon and Purley U.D.C., the Surrey C.C. have informed them that the erection of a hospital would not conflict with the policy of the Council in regard to the provision of hospital accommodation.

SLOANE-STREET.—RECONSTRUCTION. — Of premises at Nos. 125-126, for conversion into flats is contemplated. The builders are Messrs. C. H. Boyd and Sons, Ltd., 37, Craven-terrace, Paddington, W., the steelwork being by Messrs. Smith, Walker, Ltd. The architect is Mr. L. E. Ward, F.S.I., 19, Devereux-court, W.C.2. The quantity surveyor is Mr. H. A. Mackmin, 30, Bush-lane, E.C.

SOUTH MIMMS.—CHURCH.—The Royal Martyr Church Union (Rev. Allen Hay) are to build a new church and other premises. The plans have been prepared by Mr. Arthur Blomfield Jackson, F.R.I.B.A., 3, New-square, W.C.2.

SOUTHWARK. — REBUILDING. — Messrs. Watney, Combe, Reid and Co., Ltd., Stag

Brewery, Pimlico, S.W.1, are to rebuild the "Uxbridge Arms" public-house on a part of the neighbouring Rockingham-street site.

ST. MARY CRAY.—IMPROVEMENTS.—To the St. Mary Cray Station are proposed by the Southern Railway. The company's architect is Mr. J. R. Scott, L.R.I.B.A., Waterloo Station, S.E.1.

STEPNEY. — COTTAGES. — The Commercial Gas Co., Ltd., Hartford-street, E.1, are to build a number of cottages for their employees. The contractors are Messrs. Walter Lawrence and Son, Ltd., 31, Sun-street, E.C.2. The architect is Mr. Victor Wilkins, 12, York-buildings, Adelphi, W.C.

WALTHAMSTOW.—PAVILION.—The B.C. has resolved that an advertisement be issued inviting tenders for a pavilion and resident groundsman's quarters at the Low Hall Farm sports ground.

WALTHAMSTOW.—SCHOOLS.—The E.C. has further considered the position of the site for the proposed new school of three departments in the north-west area, and resolved that the site of Bull's Farm and Kinns' Nurseries extending to Folly-lane be recommended. A new school of three departments is to be built on a site to the north of the Higham Hill schools.

WANDSWORTH.—EXTENSIONS. — Bolingbroke House, Belleville-road, S.W., is to be demolished, to make way for a new block for administrative purposes at the hospital at a cost of £70,000. The architects are Messrs. Young and Hall, 17, Southampton-street, W.C.1.

WATFORD.—ESTATE.—Mr. F. R. Absalom, builder, Oxhey, Watford, has acquired the Oxhey Grange estate of about 400 acres and has plans in view for the erection of nearly 4,000 houses, etc.

WATFORD.—EXTENSIONS.—The factory of Messrs. Scammell, Ltd., motor manufacturers, is to be considerably extended. The architects are Messrs. Fuller, Hall and Foulsham, 212, High Holborn, W.C.1, while the building work is being carried out by Messrs. Fairweather and Ranger, 111, Charing Cross-road, W.C.2.

WEST HAM.—BUILDING.—Amongst the plans passed by the Town Council were plans for alterations to the Black Lion public house, 59-61, High-street, Plaistow, for Messrs. Courage and Co., brewers, Horsleydown, S.E. The architect is Mr. F. M. Kirby, F.R.I.B.A. Rebuilding of Building No. 36, for Messrs. Boake, Roberts and Co.'s premises, Carpenters-road, the architects being Messrs. Ley, Colbeck and Partners; rebuilding of a bakehouse in rear of 265, High-street, Stratford, Messrs. Stock, Page and Stock, architects; factory for Messrs. T. Tyrer and Co., Ltd., Canning-road, the architects being Messrs. C. E. Blackbourn and Partners; and alterations to the Castle public-house, 546, Barking-road, for Messrs. Hoare and Co., Ltd.

HORNSEY NEW MUNICIPAL OFFICES

The laying of the foundation-stone of the new Hornsey municipal offices and assembly-hall, by the Mayor, Councillor Wm. J. Grimshaw, J.P., took place on Thursday, November 29, in the presence of a large gathering. After an opening speech by Alderman J. W. Rowland, Chairman of the Building Committee, the Mayor laid the foundation-stone with a trowel which was then presented to him as a memento of the occasion by the architect for the new building, Mr. R. H. Ure, A.R.I.B.A. Mr. W. H. Adams, F.R.I.B.A., Borough Engineer and Surveyor, is acting in conjunction with the architect. Messrs. Selby and Sanders have been appointed the quantity surveyors, while Messrs. Reade, Jackson & Parry are the consultants for the steelwork. The heating and ventilation engineer and the lighting engineer are Mr. A. H. Baker, M.Inst.C.E., and Mr. A. H. Bray, A.M.I.E.E., respectively. The building contractors are Messrs. Gee, Walker & Slater, Ltd., and the total estimated cost of erection of the building is £121,403.

NEW PUBLIC WORKS

Cambridge.
The Congregation of the Regent House has authorised the acceptance of a tender of £59,490, from Messrs. Coulson and Sons, St. Andrew's-street, Cambridge, for the work of adapting the old library buildings to new uses, from the designs prepared by Mr. J. Murray Easton, F.R.I.B.A. (Messrs. E. Stanley Hall, Easton and Robertson), 54, Bedford-square, W.C.1.

Denbighshire.
Education Authority invite tenders for the erection of a new central school at Llay, Wrexham. Applications, with deposit of £5, to Mr. Gilbert D. Wiles, County Architect, Acton Hall, Wrexham, by December 15.

Derby.
T.C. invite tenders by December 19 for erection of workshops and offices at Sowter-road, for Electricity Committee. Specifications, on deposit of £1 1s., from Mr. C. H. Aslin, F.R.I.B.A., M.I.Struct.E., Gower-street, Derby.

Dover.
A domestic science centre is proposed at two schools for T.C. Specifications, deposit £1 1s. each, from Mr. Wm. Boulton Smith, Borough Surveyor. Tenders by January 3.

Guildford.
Surrey C.C. are recommended to carry out alterations and extensions of the Warren-road Hospital, Guildford, at an estimated cost of £43,475. Plans will be by the Surveyor of County Buildings, and the engineering works detailed by Mr. E. Lancaster Burne, 28, Victoria-street, S.W.1.

Huddersfield.
Huddersfield Industrial Society has decided to go forward with the £114,000 extensions scheme, at the site at Burton-road and East Parade.

Kent.
Kent County Council is recommended to spend £63,883 on a scheme for the completion of the Leybourne Grange Mental Colony at West Malling.

Manchester.
Manchester City Council is to be asked to acquire land in Bennett-street, Ardwick, for the erection of dwellings as part of the re-housing proposals for the Collyhurst, West Gorton, Red Bank and St. Clement's Clearance Areas. The Bennett-street site will, it is estimated, provide for 4,125 flats and houses.

Norfolk.
In connection with our paragraph in *The Builder* for November 23, in which we stated that Norfolk C.C. were inviting tenders for the erection of a police station at Thetford, the closing date for tenders should have been November 30, and not as stated.

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Northampton.
The tender of £46,725, submitted by Messrs. A. Glenn and Sons, Ltd., of Northampton, for the erection of the swimming, slipper and Turkish baths at Upper Mounts is recommended to the T.C. for acceptance.

Norwich.
T.C. invite tenders, by December 21, for the demolition of buildings situate on the proposed municipal offices' site. Specifications from Town Clerk, Guildhall. The architects are Messrs. C. H. James and Rowland Pierce, F. and A.R.I.B.A., 33, Bedford-place, W.C.1.

Poplar.
The L.C.C. propose the reconstruction of Millwall Lock bridge, at a cost estimated at £102,500.

Rugby.
T.C. invite tenders for the erection of 48 houses. Particulars from the Borough Surveyor, Benn Buildings, Rugby. Tenders by December 17. Deposit £2 2s.

Southport.
Co-operative Society, Ltd., invite tenders for extensions to their premises in Chestergate. Applications to Secretary by December 14.

NEW CINEMAS

BASINGSTOKE.—Tenders are now being invited for the building and equipment of a cinema in Wrote-street. The plans have been prepared by Mr. E. Norman Bailey, F.R.I.B.A., Westminster Bank-chambers, High-street, Maidenhead.

BEESTON.—The U.D.C. has granted a sale of land on the Beeston Fields estate for a cinema.

BIRMINGHAM.—A syndicate with which Mr. Oscar Deutsch, the Odeon Circuit, Cornhill-house, Bennetts-hill, Birmingham, is associated, has made an offer to the Corporation for the purchase of the site of King Edward's School in New-street, where it is proposed to erect a cinema, shops, etc.

ELTHAM. — Mr. Andrew Mather, L.R.I.B.A., Leicester - square - chambers, W.C.2, is preparing plans for the erection of a cinema to seat 1,700. The house is for Messrs. A. E. Abrahams, Ltd., 25, Shaftesbury-avenue, W.1.

MONKSEATON (Northumberland). — Revised plans have been approved for the erection of a cinema in Cauldwell-lane, and tenders are to be invited. The architect is Mr. L. A. G. Pritchard, 34, Moorfields, Liverpool, who is working in conjunction with Mr. W. Stockdale, architect, Howard-street. North Shields.

NORTHAMPTON.—The T.C. have agreed to lease the site of the old Technical College, Abington-square, to Associated British Cinemas, Ltd., for the erection of a super cinema and shops. Plans will be prepared by the company's architect, Mr. W. R. Glen, F.R.I.A.S., 30, Golden-square, W.1.

NOTTINGHAM.—A site on Mansfield-road has been acquired by a syndicate with which Mr. Sam Graham is associated for the erection of a super cinema to seat 1,500 on ground floor and balcony. Plans are by Mr. A. Wilford, architect, Leicester, and the contract will be executed by Mr. W. Chell, of West Bridgford. Building will shortly commence.

SOUTH SHIELDS.—Messrs. J. H. Morton and Sons, Martins Bank-chambers, Fowler-street, South Shields, have prepared plans for the erection of a cinema in Westoe to hold 1,785 people. The scheme is still in a preliminary stage.

UTTOXETER.—Permission has been received by Mr. F. P. Birch, of Ashbourne, to erect a cinema on the site of the Old Manor House in the High-street.

WHITECHAPEL. — Mr. George Coles, F.R.I.B.A, 40, Craven-street, W.C.2, is to prepare plans for the conversion of the Pavilion Theatre, Whitechapel, E., into a cinema, for H. and G. Kinemas, Ltd., 90, Regent-street, W.1.

WITTERING.—Plans have been prepared by Mr. E. Brian Tyler, A.R.I.B.A., 26, East-street, Chichester, for a new cinema, seating 510 persons, in Shore-street, East Wittering. No contracts have been placed yet.

RATES OF WAGES IN THE BUILDING TRADE

AS AND FROM 1st FEBRUARY, 1934.

[Every endeavour is made to ensure accuracy, but we cannot be responsible for errors.]

	Crafts-men.	Lab-ourers.
Aberdare	1/5	1/0½
Abergavenny	1/5	1/0½
Aberystwyth	1/2	10½
Accrington	1/5½	1/1½
Aldeburgh	1/1½	10½
Aldershot	1/2½	11
Alfreton	1/5½	1/1½
Alnwick	1/4½	1/0½
Altrincham	1/5½	1/1½
Amble	1/4½	1/0½
Amersham	1/3½	11½
Ammanford	1/5½	1/1½
Andover	1/2½	11
Arundel	1/2½	11
Ascot	1/3½	11½
Ashby-de-la-Zouch	1/4	1/-
Ashford (Kent)	1/2½	11
Ashford (Middx.)	1/4	1/-
Ashington	1/4½	1/0½
Ashtead	1/4	1/-
Ashton-under-Lyne	1/5½	1/1½
Aylesbury	1/2½	11
Aylsham	1/2	10½
Bagshot	1/2½	11
Banbury	1/3	11½
Barnsley	1/5½	1/1½
Barnstaple	1/3½	11½
Barrow-in-Furness	1/5½	1/1½
Barry	1/5½	1/1½
Basingstoke	1/3	11½
Bath	1/4½	1/0½
Batley	1/5½	1/1½
Beaconsfield	1/3½	11½
Beccles	1/2	10½
Bedford	1/4½	1/0½
Berkhamsted	1/3	11½
Berwick	1/4½	1/0½
Beverley	1/5½	1/1½
Bexhill	1/3	11½
Bideford	1/3½	11½
Biggleswade	1/3	11½
Billericay	1/2	10½
Birchington	1/3	11½
Birkenhead	1/7‡	1/2½
Birmingham	1/5½	1/1½
Bishop Auckland	1/5	1/0½
Bishops Stortford	1/3	11½
Blackburn	1/5½	1/1½
Blackpool	1/5½	1/1½
Blyth	1/5½	1/1½
Bognor Regis	1/3	11½
Bolton	1/5½	1/1½
Bournemouth	1/4	1/-
Bracknell	1/3	11½
Bradford	1/5½	1/1½
Bradford-on-Avon	1/2½*	11
Braintree	1/3½	11½
Brentwood	1/5	1/0½
Bridgwater	1/3	11½
Bridlington	1/5	1/0½
Brighouse	1/5½	1/1½
Brighton	1/4	1/-
Bristol	1/5½	1/1½
Broadstairs	1/3	11½
Bromsgrove	1/4½	1/0½
Bromyard	1/2	10½
Buckley	1/5½	1/1½
Bungay	1/1½	10½
Burnham-on-Crouch	1/2	10½
Burnley	1/5½	1/1½
Burslem	1/5½	1/1½
Burton-on-Trent	1/5½	1/1½
Bury	1/5½	1/1½
Bury St. Edmunds	1/2½	11
Buxton	1/5	1/0½
Byfleet	1/3	11½
Cambridge	1/5	1/0½
Canterbury	1/3	11½
Cardiff	1/5½	1/1½
Carlisle	1/5½	1/1½
Carnforth	1/5½	1/1½
Castleford	1/5½	1/1½
Caterham	1/4	1/-
Chard	1/2*	10½
Chatham	1/3½	11½
Chelmsford	1/4	1/-
Cheltenham	1/4	1/-
Chepstow	1/4½	1/0½
Chertsey	1/4	1/-
Chester	1/5½	1/1½
Chesterfield	1/5½	1/1½
Chichester	1/3	11½
Chorley	1/5½	1/1½
Cirencester	1/3*	11½
Clacton	1/3½	11½
Cleveleys	1/5½	1/1½
Clitheroe	1/5½	1/1½
Cobham	1/4	1/-
Colchester	1/4	1/-
Colwyn Bay	1/4½	1/0½
Congleton	1/5	1/0½
Coventry	1/5½	1/1½
Cranbrook	1/2	10½
Cranleigh	1/2½	11
Crawley	1/3	11½
Crewe	1/4½	1/0½
Cromer	1/2½	11
Crowborough	1/3	11½
Cuckfield	1/3	11½
Darlington	1/5½	1/1½
Darwen	1/5½	1/1½
Daventry	1/4	1/-
Deal	1/3	11½
Denbigh	1/4	1/-
Derby	1/5½	1/1½
Devizes	1/2*	10½
Dewsbury	1/5½	1/1½
Didcot	1/3½	11½
Diss	1/2	10½
Doncaster	1/5½	1/1½
Dorchester	1/2½*	11
Dorking	1/3	11½
Dover	1/3	11½
Dovercourt	1/3½	11½
Driffield	1/4	1/-
Droitwich	1/4½	1/0½
Dudley	1/5½	1/1½
Dunstable	1/2	10½
Durham	1/5½	1/1½
Eastbourne	1/4	1/-
E. Glam. (Mon. Val.)	1/5	1/0½
East Grinstead	1/3	11½
Edenbridge	1/3	11½
Ely	1/2	10½
Epping	1/4½	1/0½
Exeter	1/4½†	1/0½
Exmouth	1/3½	11½
Fakenham	1/2	10½
Falmouth	1/3½	11½
Fareham	1/3	11½
Faversham	1/2½	11
Felixstowe	1/4	1/-
Filey	1/4	1/-
Fleetwood	1/5½	1/1½
Flint	1/5	1/0½
Folkestone	1/3	11½
Frinton-on-Sea	1/3½	11½
Frome	1/2½*	11
Gainsborough	1/4½	1/0½
Gateshead	1/5½	1/1½
Gillingham	1/3½	11½
Glossop	1/5	1/1½
Gloucester	1/4½†	1/0½
Godalming	1/3½	11½
Goole	1/4½	1/0½
Gosport	1/4½	1/0½
Grantham	1/4	1/-
Gravesend	1/5	1/0½
Gt. Yarmouth	1/3	11½
Grimsby	1/5½	1/1½
Guildford	1/3½	11½
Guilsborough	1/4	1/-
Halifax	1/5½	1/1½
Hanley	1/5½	1/1½
Harpenden	1/3	11½
Harrogate	1/5½	1/1½
Hartlepools	1/5½	1/1½
Harwich	1/3½	11½
Haslemere	1/2½	11
Hastings	1/3	11½
Hatfield	1/4½	1/0½
Haywards Heath	1/3	11½
Hednesford	1/5	1/0½
Hemel Hempstead	1/4	1/0
Henley	1/3½	11½
Hereford	1/3½*	11½
Herne Bay	1/3	11½
Hertford	1/4½	1/0½
Heysham	1/5½	1/1½
Hitchin	1/3½	11½
Hoddesdon	1/4½	1/0½
Holt	1/1½	10½
Horley	1/3	11½
Horsham	1/2½	11
Horwich	1/5½	1/1½
Huddersfield	1/5½	1/1½
Hull	1/5½	1/1½
Hunstanton	1/2	10½
Huntington	1/2½	11
Ilfracombe	1/3½	11½
Ingatestone	1/3	11½
Ipswich	1/4½	1/0½
Isle of Thanet	1/3	11½
Isle of Wight	1/2	10½
Keighley	1/5½	1/1½
Kenilworth	1/5½	1/1½
Kettering	1/4½	1/0½
Kidderminster	1/4½	1/0½
King's Lynn	1/3	11½
Kirkham	1/5½	1/1½
Knowle	1/5	1/0½
Lancaster	1/5½	1/1½
Leamington	1/5	1/0½
Leatherhead	1/4	1/-
Leeds	1/5½	1/1½
Leicester	1/5½	1/1½
Leighton Buzzard	1/2	10½
Letchworth	1/3½	11½
Lewes	1/2	10½
Lichfield	1/4½	1/0½
Lincoln	1/5½	1/1½
Littlehampton	1/3	11½
Liverpool	1/7‡	1/2½
Llandudno	1/4½	1/0½
Llanelly	1/5½	1/1½
London—		
12 m. radius	1/7*	1/2½
12-15 m. radius	1/6½*	1/2
Long Eaton	1/5½	1/1½
Longton	1/5½	1/1½
Loughborough	1/5½	1/1½
Louth	1/4	1/-
Lowestoft	1/3	11½
Luton	1/4	1/-
Macclesfield	1/5	1/0½
Maidenhead	1/4	1/-
Maidstone	1/3½	11½
Malvern	1/4	1/-
Manchester	1/5½	1/1½
Manningtree	1/2	10½
Mansfield	1/5½	1/1½
March	1/2	10½
Margate	1/3	11½
Market Harborough	1/4½	1/0½
Matlock	1/4	1/-
Melton Constable	1/1½	10½
Melton Mowbray	1/4½	1/0½
Merthyr Tydfil	1/5	1/0½
Middlesbrough	1/5½	1/1½
Middleton	1/5½	1/1½
Middlewich	1/4½	1/0½
Milford Haven	1/3½	11½
Morecambe	1/5½	1/1½
Morley	1/5½	1/1½
Mundesley	1/2	10½
Nantwich	1/4½	1/0½
Newark	1/4½	1/0½
Newbury	1/2½	11
Newcastle-on-Tyne	1/5½	1/1½
Newcastle-u-Lyme	1/5½	1/1½
New Forest	1/2½	11
Newmarket	1/3	11½
Newport, Mon.	1/5½	1/1½
Newport Pagnell	1/2½	11
Northampton	1/5½	1/1½
Norwich	1/5	1/0½
Nottingham	1/5½	1/1½
Nuneaton	1/5½	1/1½
Oakham	1/4	1/-
Oldham	1/5½	1/1½
Ormskirk	1/5½	1/1½
Oxford	1/4½	1/0½
Oxted	1/2½	11
Paignton	1/4½	1-0½
Peterborough	1/4½	1/0½
Plymouth	1/5½†	1/1½
Pontypridd	1/5	1/0½
Portsmouth	1/4½	1/0½
Port Talbot	1/5½	1/1½
Preston	1/5½	1/1½
Pulborough	1/2	10½
Ramsgate	1/3	11½
Reading	1/4½	1/0½
Redcar	1/5½	1/1½
Redditch	1/4½	1/0½
Redhill	1/3½	11½
Reigate	1/3½	11½
Retford	1/4	1/-
Ripon	1/4	1/-
Rochdale	1/5½	1/1½
Rochester	1/3½	11½
Rugby	1/5½	1/1½
Saffron Walden	1/2	10½
St. Albans	1/5	1/0½
St. Helens	1/5½	1/1½
St. Neots	1/2½	11
Salisbury	1/2½*	11
Salisbury Plain	1/2½*	11
Sawbridgeworth	1/3½	11½
Saxmundham	1/1½	10½
Scarborough	1/5	1/0½
Selby	1/5½	1/1½
Sevenoaks	1/3½	11½
Sheerness	1/3	11½
Sheffield	1/5½	1/1½
Shipley	1/5½	1/1½
Shoeburyness	1/4½	1/0½
Shoreham	1/4	1/-
Shrewsbury	1/4½	1/0½
Sittingbourne	1/2½	11
Skegness	1/4½	1/0½
Sleaford	1/4	1/-
Slough	1/4½	1/0½
Southampton	1/4½	1/0½
Southend-on-Sea	1/4½	1/0½
Southport	1/5½	1/1½
South Shields	1/5½	1/1½
Spalding	1/3	11½
Stafford	1/5	1/0½
Staines	1/4	1/-
Stamford	1/4	1/-
Stevenage	1/3½	11½
Stockport	1/5½	1/1½
Stockton-on-Tees	1/5½	1/1½
Stoke-on-Trent	1/5½	1/1½
Stourbridge	1/5	1/0½
Stourport	1/4½	1/0½
Stowmarket	1/2	10½
Stratford-on-Avon	1/4	1/-
Stroud	1/3½†	11½
Sunderland	1/5½	1/1½
Sutton Coldfield	1/5½	1/1½
Swaffham	1/1½	10½
Swanage	1/3½*	11½
Swansea	1/5½	1/1½
Swindon	1/4*	1/-
Tamworth	1/5	1/0½
Taunton	1/3½	11½
Tenterden	1/2½	11
Tewkesbury	1/4*	1/-
Thetford	1/2	10½
Thorpe Bay	1/4½	1/0½
Todmorden	1/5½	1/1½
Tonbridge	1/3½	11½
Torquay	1/5	1/0½
Totnes	1/3½†	11½
Trowbridge	1/2½*	11
Truro	1/2½	11
Tunbridge Wells	1/3½	11½
Uppingham	1/4	1/-
Uttoxeter	1/3½	11½
Wakefield	1/5½	1/1½
Walsall	1/5½	1/1½
Walsden	1/5½	1/1½
Walton-on-Naze	1/3½	11½
Ware	1/4½	1/0½
Warminster	1/2½*	11
Warrington	1/5½	1/1½
Warwick	1/5	1/0½
Wellingborough	1/4½	1/0½
Wells (Norfolk)	1/1½	10½
Welwyn	1/3	11½
Welwyn Gar. City	1/5½	1/1½
West Bromwich	1/5½	1/1½
Westcliff-on-Sea	1/4½	1/0½
Weston-super-Mare	1/4½	1/0½
Weybridge	1/4	1/-
Weymouth	1/3*	11½
Whitby	1/4½	1/0½
Whitstable	1/3	11½
Widnes	1/5½	1/1½
Wigan	1/5½	1/1½
Wigton	1/4	1/-
Wellington	1/5	1/0½
Wilmslow	1/5½	1/1½
Winchester	1/3½	11½
Windermere	1/3½	11½
Windsor	1/4½	1/0½
Wisbech	1/2	10½
Witham	1/3½	11½
Woking	1/3½	11½
Wokingham	1/3½	11½
Wolverhampton	1/5½	1/1½
Woodbridge	1/2	10½
Worcester	1/4½	1/0½
Workington	1/4	1/-
Worksop	1/4	1/-
Worthing	1/3	11½
Wrexham	1/5	1/0½
Wroxham	1/2½	11
Wycombe	1/4	1/-
Wymondham	1/1½	10½
Yeovil	1/3*	11½
York	1/5½	1/1½

* Painters, 1d. less than other Craftsmen. † Painters, ½d. less than other Craftmen. ‡ Plasterers 1s. 8d.

For Building Trade Wages in Scotland, see page 1005.

CONTRACTS OPEN

For some contracts still open, but not included in this list, see previous issues. Those with an asterisk are advertised in this number. Certain conditions beyond those given in the following information are imposed in some cases, such as that advertisers do not bind themselves to accept the lowest or any tender, that a fair wages clause shall be observed, that no allowance will be made for tenders; and that deposits are returned on receipt of a bona-fide tender, unless stated to the contrary.

The date given is the latest date when the tender, or the names of those willing to submit tenders, may be sent in, the name and address at the end is the person from whom or place where quantities, forms of tender, etc., may be obtained.

Following is a list of abbreviations:—Borough Surveyor, B.S.; Borough Engineer, B.E.; District Surveyor, D.S.; Town Clerk, T.C.; County Engineer, C.E.; County Surveyor, C.S.; Surveyor, S.; Engineer, E.

BUILDING, PAINTING, ELECTRIC LIGHTING, HEATING, etc.

DECEMBER 10.

Chesterfield. — Painting. — At Institution, for Derbyshire C.C. County Architect, County Offices, Derby. Dep. £2 2s.

Chingford.—Erection.—Of wrought-iron gates and railings for construction of brick and stone dwarf walls and piers and contingent works, for U.D.C. S. J. Hellier, E. and S. Dep. £1 1s.

Dawlish.—Adaptation.—Of High House as children's home, for Devon C.C. County Architect, 97, Heavitree-rd., Exeter.

Derby.—Painting.—At Bakewell Institution and Chapel Institution, for Derbyshire C.C. County Architect, County Offices. Dep. £2 2s.

Isleworth.—Erection.—Of Marlborough junior school at Busch-corner, for Heston and Isleworth T.C. J. G. Carey, B.E., Hounslow. Dep. £2 2s.

Keighley.—Houses.—72, and 8 bungalows at Woodhouse housing estate, for T.C. E. G. Felgate, A.R.I.B.A., Borough Architect, Gas Offices, Cook-lane. Dep. £2.

Kingswood.—Convenience.—In Kingswood Park, for U.D.C. S. Dep. £1 1s.

Kirkcaldy.—Employment Exchange.—At Cowan-st., for H.M.O.W. Architect, H.M. Office of Works, 122, George-st., Edinburgh. Dep. £1 1s.

Mexborough.—Houses.—102, at Windmill and Cowper-rd., for U.D.C. G. Fenwick Carter, S. Dep. £2 2s.

Morley.—Improvement.—To heating installation at Grammar School, for West Riding C.C. Education Officer, County Hall, Wakefield.

Northam (Devon).—Houses.—20, at Torridge-rd., Appledore, for U.D.C. W. G. Champion, S. Dep. £2 2s.

Portsmouth.—Erection.—Of Langstone Junior school, for E.C. A. J. Sharp, L.R.I.B.A. Dep. £2 2s.

Purfleet.—Houses.—16, adjoining Hilltop-rd., West Thurrock, together with road and sewer works, for U.D.C. C. S. H. Hawkes, Acting E. and S. Dep. £2 2s.

Sheffield.—Chapel.—At Shiregreen Cemetery, for T.C. W. Geo. Davies, F.R.I.B.A., City Architect. Dep. £2.

Southampton.—Extension.—Of boiler-house at generating station, Western Esplanade, for T.C. W. G. Turner, B. Electrical E. Dep. £5 5s.

Torpoint. — Houses.—26, for U.D.C. Charles Cheverton, architect, 64a, Chapel-st., Devonport, Plymouth.

Washington. — Houses. — 30, near The Drive, Heworth-rd., for U.D.C. R. J. Swaddle, architect, Council-chambs. Dep. £3 3s.

DECEMBER 11.

Bangor.—Minor Alterations.—And electrical heating at St. David's Hospital, Bangor, for Caernarvonshire C.C. D. G. Jones, clerk, County Offices, Caernarvon.

Barnstaple.—Painting Work.—At various schools, for T.C. B.S.

Brooklands, near Manchester.—Houses.—100, at Brooklands-pk. Architectural Dept., The Housing Bureau, 6, Brown-st., Manchester. Dep. £5 5s.

Colwyn Bay.—Alterations.—And extensions to "High Mount," King's-rd., Old Colwyn, for T.C. W. J. Dunning, B.E. and S.

Essex.—Erection.—Of Upminster Senior School, for C.C. J. Stuart, F.R.I.B.A., Chelmsford. Dep. £2 2s.

Essex. — Erection. — Of Romford Pettit's Lane Senior School, for C.C. J. Stuart, F.R.I.B.A., Chelmsford. Dep. £2 2s.

Garforth.—Bungalows.—8, for aged persons on East Garforth housing estate, for U.D.C. R. A. Easdale & Son, architects, County-chambs., Castleford. Dep. £2 2s.

Horsforth.—Houses.—36, and six bungalows, for aged people, for U.D.C. Jas. E. Aldersley, registered architect. Dep. £2.

Hucknall.—Houses.—60, at Washdyke-lane estate, for U.D.C. Architect and Surveyor, Council Offices. Dep. £2 2s.

Litherland (Liverpool). — Erection. — Of Sports Pavilion and Cafe in Hatton Hill Park, for U.D.C. Geo. Ponsford.

Port Talbot.—Houses.—14 four-bedroomed type, and 21 three-bedroomed type, at Sandfields, Aberavon, for T.C. B.E., Aberavon. Dep. £2 2s.

Wednesbury.—Houses.—148, at Crankhall-lane (West) and Dangerfield-lane sites, for T.C. Arthur Booth, B.E. and S.

DECEMBER 12.

Barnack.—External Painting.—And general repairs to old station buildings and stationmaster's house, for Soke of Peterborough C.C. C.S., County Council Offices, Bridge-st., Peterborough.

Birkenhead.—Coke Depot.—Beaconsfield-rd., New Ferry, for T.C. Gas Engineer, Gas Offices, Hind-st. Dep. £1 1s.

Chadderton.—Houses.—40, in Henley-st., for U.D.C. S. Dep. £2 2s.

Edinburgh.—Alterations.—At 3, George IV. Bridge, for extension to Central Library, for T.C. E. J. MacRae, City Architect.

Glasgow.—Electrical Work.—At St. George's-rd. school, 374, St. George's-rd., for T.C. Education Offices (Property Dept.), 129, Bath-st. Dep. £1 1s.

Hetton.—Bungalows.—32, at Easington-la., and also roads and sewers in connection, for U.D.C. A. H. Fennell, architect, Bridge End-chambs., Chester-le-Street.

Liverpool.—Erection.—Of 2 shops, office and residences at Broadway, Norris Green estate, for T.C. Director of Housing, Municipal Annexe, Dale-st. Dep. £1 1s.

Rye.—Construction. — Of reinforced concrete water tower, for T.C. Rofe & Raffety, 208, Abbey House, Victoria-st., Westminster, S.W.1. Dep. £2 2s.

Wembley.—Erection.—Of 4 pavilions at Vale Farm sports ground, for U.D.C. Treasurer, 117a, High-rd. Dep. £1 1s.

DECEMBER 13.

Bournemouth.—Shelter.—And beach bungalows at foot of zig-zag path, West Promenade, for T.C. F. P. Dolamore, B.E. Dep. £2 2s.

Durham.—Construction.—Of reinforced concrete water tower at Sherburn Hill, for County Water Board. L. G. Mouchel & Partners, Ltd., 25, New Bridge-st., Newcastle-on-Tyne. Dep. £2 2s.

Immingham.—School.—For Lindsey C.C. Philip W. Birkett, A.R.I.B.A., County Architect, County Offices, Lincoln. Dep. £2 2s.

Larne.—Painting.—Of interior of district hospital. S. Robinson, Victoria-st.

Morpeth. — Alterations. — To postal and engineering garage, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

Nottingham.—Houses.—148, on vacant sites in city, for T.C. E. Phillips, Housing Architect, Exchange Buildings East. Dep. £1.

Sheffield.—Electric Wiring.—And fittings at Lancasterian and Wincobank Council schools, and Highfield and Newhall special schools, for T.C. W. Geo. Davies, F.R.I.B.A., City Architect. Dep. £2.

Wetherby.—Houses.—Four, at Collingham, for R.D.C. A. Suttel, architect, 18, Raglan-st., Harrogate. Dep. £1 1s.

DECEMBER 14.

Ashton-under-Lyne. — Extension. — Of West End Council school, also heating installation, for T.C. G. W. Handforth, Director of Education, 8, Warrington-st. Dep. £2 2s.

Birkenhead.—Tenements.—16 4-storied, at Church-st., for T.C. B. Robinson, B.E. and S.

Birkenhead.—Demolition.—Of various properties, for T.C. B. Robinson, B.E. and S.

Burford.—Re-wiring.—And renewal of installation of electric light and fittings at Grammar School, for Oxfordshire C.C. T. O. Willson, Director of Education, County Offices, Oxford. Dep. £1 1s.

Chippenham.—Alterations.—To form master's and nurses' quarters at Rowden Hill House, for Wilts C.C. T. Walker, F.R.I.B.A., County Architect. County Architect's Dept., County Offices, Trowbridge. Dep. £2 2s.

Derrycughan.—Installation.—Of central low-pressure hot-water heating system, for new P.E. school in course of erection at Derrycughan, near Markethill, for Armagh County E.C. G. D. Taylor, architect, College-st., Armagh. Dep. £1 1s.

Dublin. — Improvements. — To Lettermacow National school, Co. Galway, for Commissioners of Public Works. T. Cassedy, secretary, Office of Public Works, Dublin. Dep. £1.

Dun Laoghaire.—Houses.—25, at Hybla, York-rd., and 53 at Sallyhoggin, for T.C. P. J. Hernon, Borough Manager and T.C. Dep. £1.

Knockleade.—House.—For Irish Land Commission. M. Deegan, secretary, Upper Merrion-st., Dublin. Dep. £1.

Pembroke Dock.—Alterations.—And additions to existing buildings to enlarge kitchen and provide laundry accommodation, and redecoration of interior and exterior of staff quarters, at Infectious Diseases Hospital for Pembrokeshire, C.C. O. T. Thomas, County Architect, County Offices, Haverfordwest. Dep. £2 2s.

***Somerset.**—Laboratory Fittings.—At Weston-super-Mare new County School, for C.C. A. J. Toomer, County Architect, Taunton. Dep. £5 5s.

Southgate.—Flats.—44, on Reservoir estate, N.14, for B.C. R. Phillips, B.S., Palmers Green, N.13. Dep. £2.

***Stockport.**—Extensions.—To Stockport Co-operative Society, Ltd., premises, Chestergate, for the Society.

Watford.—Erection.—Of public convenience and shelter in Cassiobury Park, for B.C. W. W. Newman, B.E. Dep. £2 2s.

DECEMBER 15.

Ashbourne.—Houses.—100, on Clifton-rd. housing site, for U.D.C. D. Powell, E. and S. Dep. £2 2s.

Axbridge.—Erection.—Of ward block and additions to administration block and contingent works at Isolation Hospital, for Joint Hospital Committee. A. J. Pictor, F.R.I.B.A., architect, Abbey-chams., York-st., Bath. Dep. £2 2s.

***Denbighshire.**—Erection.—Of central school at Llay, nr. Wrexham, for C.C. G. D. Wiles, County Architect, Wrexham. Dep. £5.

Dorking.—Cottages.—2, at rear of existing Pilgrim's Way Cottages, Reigate-rd., for U.D.C. S. Dep. £2 2s.

Faversham.—Erection.—Of 24 houses and other works, for T.C. S. P. Andrews, B.S., 20, West-st. Dep. £3 3s.

Lossiemouth and Branderburgh.—Houses.—228 at Coulardhill, in various trades, for T.C. Geo. King, B.S., Lossiemouth.

DECEMBER 17.

Belfast.—Floral Hall.—At Bellevue-gdns., Antrim-rd., for T.C. City S., Room 91, City Hall. Dep. £2 2s.

Blackpool.—Piling.—And foundations in reinforced concrete to bus garage extensions, Rigby-rd., for T.C. B.E. Dep. £1.

Buxton.—Alterations.—And additions at Cavendish girls' high school, for Derbyshire C.C. George H. Widdows, County Architect, County Offices, Derby. Dep. £2 2s.

Cardiff.—Shelter.—At junction of Newport-rd. and Broadway, for T.C. City E.

Clay Cross.—School.—And alterations to Tupton Hall, for Derbyshire C.C. County Architect, County Offices, Derby. Dep. £2 2s.

***Coalville.**—Erection.—Of employment exchange, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

Drinagh.—Erection.—Of two creameries, one at Lowertown, Schull, and one at Kealkil, Bantry, for Co-operative Creamery, Ltd., Drinagh, Dunmanway, Co. Cork.

Dunmow.—Houses.—Two, at Stebbing, for R.D.C. A. E. Floyd, clerk. Dep. £1 1s.

Ilford.—Erection.—Of 9 in. dwarf brick boundary wall on Barkingside cemetery extension, for T.C. L. E. J. Reynolds, B.E. Dep. £2 2s.

Leeds.—Houses and Flats.—280, on Dewsbury-rd. estate, for T.C. R. A. H. Livett, 25, Great George-st. Dep. £10.

Leeds.—Painting.—Interior Market hall, for T.C. Fred Broadbent, F.R.I.B.A., architect.

Lees.—Houses.—14, at Beckett-st., for U.D.C. C. T. Taylor, Roberts & Bowman, architects, 10, Clegg-st., Oldham. Dep. £1 1s.

Northampton.—Installation.—Of electric light in 1,050 houses erected on various housing estates, for T.C. R. A. Winfield, B.E. Dep. £2 2s.

***Rugby.**—Houses.—48, on Addison-rd., for T.C. B.S. Dep. £2 2s.

St. Helens.—Premises.—In Market-st., for T.C. A. P. Statham, Borough and Water E. Dep. £2.

***Worcester.** — Reconditioning. — Of Bromsgrove Poor Law Institution, for C.C. A. V. Rowe, County Architect, 38, Foregate-st.

DECEMBER 18.

***Devonport.**—Flats.—24, at Tamar-st. and John-st., for Plymouth T.C. T.C.

***Droylesden.**—Erection.—Of telephone exchange, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

***Durham.**—Erection of six homes, two workroom blocks, school, staffs' residences and other buildings, together with roadways, etc., at school, Aycliffe, for C.C. T. Taliesin Rees and Richard Holt, FF.R.I.B.A., 64, Rodney-st., Liverpool. Dep. £10 10s.

***Gerrards Cross.**—Erection.—Of telephone exchange, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

THE
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EMPLOYERS'
Insurance Association Ltd.
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DECEMBER 19.

***Bridgnorth.**—Alterations.—And additions to post office and telephone exchange, for H.M.O.W., Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

***Derby.**—Erection.—Of workshops and offices in Sowter-rd., for Electricity Committee. C. H. Aslin, F.R.I.B.A. Dep. £1 1s.

DECEMBER 20.

***Little Chalfont.**—Erection.—Of telephone exchange, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

***London.**—Extensions.—To Home Office Industrial Museum, for H.M.O.W. Room 65D, Third Floor, H.M. Office of Works, London, S.W.1. Dep. £1.

***Southall.**—Demolition.—Of 2 houses at Shackleton-rd., for U.D.C. J. B. Thomson, E. and S.

***Southgate.**—Building.—Two caretakers' lodges, convenience, two shelters, pond and playground apparatus, at Children's Boundary playing fields, N.13. R. Phillips, B.S. Dep. £2.

DECEMBER 21.

Belfast.—Erection.—Of M'Quiston P.E. school, for T.C. Education Architect, Victoria-st. Dep. £2 2s.

***Norwich.**—Demolition.—Of buildings situate on proposed municipal offices site, for T.C. T.C.

Nottingham.—Office Premises.—For River Trent Catchment Board. Gregory & Robinson, architects, Castle Gate-chambs., Castle-gate. Dep. £5.

***Tottenham.**—Erection.—Of branch library at Compton-crescent, for T.C. Capt. H F. Wilkinson, B.E.

DECEMBER 24.

***Hellesdon.**—Extension.—To Nurses' Home, Drayton Old Lodge, for Norwich T.C. City Eng. Office. Dep. £2.

DECEMBER 26.

***Buntingford.**—Erection.—Of 24 houses in Cottered and 12 houses in Buckland Parishes, for R.D.C. E. G. Thody, surveyor. Dep. £1 1s. each.

Goole.—Painting.—Of 108 houses, for T.C. B.E.

Hitchin.—Bungalows.—12, and two cottages in various parts of district, for R.D.C. A. E. Passingham, clerk, Council Offices, 9, Bancroft.

DECEMBER 28.

***Hampton Wick.**—12 Flats.—At rear of 63, High-st., for U.D.C. C. Edgar Shelly.

DECEMBER 29.

***Bexhill.**—Erection.—Of public conveniences, 2 sports shelters, within the Borough, for T.C. B.S. Dep. £1 1s.

DECEMBER 30.

***Bootle.**—Erection.—Of workshops in Corporation storeyard, Linacre-lane, for C.B. T.C. Dep. £1.

DECEMBER 31.

***Brighton.**—Erection.—Of 8 shops at Rottingdean, for C.B. B.E. and S.

***Hastings.**—Houses.—126, on three sites, for C.B. S. Little, B. and Water Eng. Dep. £3 3s.

Bangor, North Wales.—Houses.—84, on Ffridoedd estate and 12 on Hendrewen estate, for T.C. B. Price Davies, L.R.I.B.A. Dep. £3 3s.

JANUARY 1, 1935.

***Southampton.**—Erection.—Of Poor Law Children's Home at Compton, near Winchester, for C.C. A. L. Roberts, Winchester. Dep. £1 1s.

JANUARY 3, 1935.

***Dover.**—Erection.—Of domestic science centre at Astor-av. girls' school, for B.C. Wm. Boulton Smith, B.S. Dep. £1 1s.

JANUARY 5, 1935.

***Walthamstow.**—Houses.—And flats, 20, at Priors croft, Higham Hill, for B.C. F. G. Garner, T.C. Dep. £1 1s.

JANUARY 8, 1935.

***London.**—Construction.—Of turbine house, extension of existing boiler-house and other works at Hammersmith pumping station, for Metropolitan Water Board. Chief E. (Room 201), 73, Rosebery-av., E.C.1.

JANUARY 9, 1935.

***Deptford.**—Erection.—Of gatekeeper's hut, superintendent's office and public shelter at Marvels-lane, new cemetery, Grove Park, S.E.12, for B.C. B.E. and S., Town Hall, New Cross, S.E.4. Dep. £1 1s.

NO DATE.

Alva.—Police station.—In various trades, for Clackmannan C.C. T. Frame & Son, architects, 43, Mill-st.

Belfast.—Construction.—Of foundations for extensions to pump house, circulating water channels and turbine house at harbour power station, for T.C. City Electrical Engineer and Manager, East Bridge-st. Dep. £2 2s.

Dromtariffe.—Alterations.—To store buildings, for Co-operative Creamery, Ltd., Banteer.

MATERIALS, etc.

DECEMBER 10.

Dorset.—Road Material.—For C.C. J. Leslie Torr, clerk, County Offices.

DECEMBER 12.

Norton - Radstock. — Road Materials. — For U.D.C. S.

DECEMBER 15.

Kent.—Roadstone.—For C.C. C.S., St. Peter-st., Maidstone.

ENGINEERING, IRON AND STEEL.

DECEMBER 15.

Lichfield.—Reconstruction.—Of bridges in reinforced concrete, with ancillary works on approaches, for Staffordshire C.C. C.S., County-bldgs, Stafford. Dep. £5 each contract.

***Morecambe and Heysham.**—Filtration Plant Installation.—At swimming bath to be erected on site adjoining promenade, for T.C. Jos. Entwistle, T.C.

Norwich.—Cottages.—Two, at Thorpe power station, for T.C. City Electrical Engineer. Dep. £1 1s.

ROAD, SEWERAGE AND WATER WORKS.

DECEMBER 10.

Calverley.—Laying.—Of 516 yds. of 9 in. earthenware and cast iron sewers, together with manholes in lands adjacent to Leeds-rd., Thornbury, for U.D.C. R. T. Haley, S. Dep. £1 1s.

London (Edmonton).—Street Works.—In Hazelwood-rd., for U.D.C. J. Willis, E. and S., Town Hall, Edmonton, N.9. Dep. £2 2s.

Southampton.—Street Works.—At Bassett-cres. and Meadowmead-ave., for T.C. B.E., Civic Centre. Dep. £1 11s. 6d.

DECEMBER 11.

Enfield.—Making-up.—Of various private streets, for U.D.C. H. R. Crabb, E. and S., Percy House, 7, Little Park-gdns. Dep. £2 2s.

Grays.—Making-up.—Of Chestnut-ave., for Grays Thurrock U.D.C. H. S. Goodall, E. and S., 57, High-st. Dep. £2 2s.

Hayling.—Laying.—About 585 yds. 3-in. spun iron water mains, with fire hydrants, at New-rd., for Havant and Waterloo U.D.C. E., Council Offices, 1, Park-rd., Havant. Dep. £1 1s.

London (Walthamstow).—Making-up.—Of Charter-av., Forest View-rd. (part 2), Queenswood-av. and Wigton-rd., for T.C. T. S. Cunningham, B.E.

Manchester.—Sewering.—Draining, paving and flagging of various roads, for T.C. S. Dep £1 1s.

Port Talbot.—Construction.—Of 2 ft. 6 in. dia. concrete tube sewer and other work in connection, adjoining Sandfields housing site, for T.C. B.E., Aberavon. Dep. £2 2s.

Port Talbot.—Road.—And sewers in connection with erection of 35 houses at Sandfields, Aberavon, for T.C. B.E., Aberavon. Dep. £2 2s.

DECEMBER 12.

Northwich.—Laying.—Of about 530 lin. yds. of 9-in. earthenware sewer, the construction of manholes and other ancillary works, in South London-rd., Davenham, for R.D.C. J. Birtwistle, E. and S., Whitehall, Hartford. Dep. £2 2s.

Ramsgate.—Reconstruction.—Of Addington-st. and Harbour-st., for T.C. A. Adlington, B.E., 16, Albion-pl.

Twickenham.—Street Works.—For T.C. G. R. King, B.E. Dep. £2 2s.

DECEMBER 13.

Birmingham.—Construction.—Of about 2,580 yds of brick and concrete, concrete tube and stoneware pipe sewers and culverts in Perry Hall playing fields, also in Wood-lane, Worlds End-rd., and Hamstead Hill, Handsworth, for T.C. H. Humphries, City E. Dep. £2.

Leeds.—Kerbing.—Tarpaving footpaths and carriageways in streets on Torre housing estate, for Highways Committee. Highways Engineer, 155, Kirkstall-rd. Dep. £1 1s.

DECEMBER 14.

Audenshaw.—Street Works.—At Park-rd. and Hawthorn-st., road repair works in Corporation-rd., for U.D.C. H. M. Doxey, S. Dep. £1 1s.

Oldbury.—Construction.—Of roads and sewers for 160 houses on Bleakhouse estate, Warley, for U.D.C. W. Greenwood, S., Municipal Bank-chambs. Dep. £2 2s.

Southgate. — Construction. — Of 440 yds. of sewers and 350 yds. of asphalt carpeted concrete road, for B.C. R. Phillips, Palmers Green, N.13. Dep. £2.

DECEMBER 15.

Ashbourne.—Laying.—Of sewers, surface water drains, and construction of reinforced concrete roads, for U.D.C. D. Powell, E. and S. Dep. £2 2s.

Dolgelley.—Works.—In connection with water supply to Brithdir Council school, for Merioneth E.C. Norman L. Jones, County Architect, County Offices, Dolgelley.

Wirral. — Making-up. — Of various roads, for U.D.C. S. Dep. £1 1s.

Public Appointments.

DECEMBER 10.

Hoddesdon.—Clerk of Works.—For U.D.C. F. W. Mutton.

London.—District Surveyor for Islington West, for L.C.C. Clerk, County Hall, S.E.1.

DECEMBER 12.

Chepping Wycombe.—Clerk of Works, for T.C. P. B. Beecroft, T.C.

Walthamstow.—Two Architectural Assistants (temporary), for T.C. T.C.

DECEMBER 14.

***Enfield.**—Town Planning Assistant.—For U.D.C. Town Planning Officer and Building Surveyor, 7, Little Park-gdns.

***Enfield.** — District Building Inspector. — For U.D.C. Town Planning Officer and Building Surveyor, 7, Little Park-gdns.

DECEMBER 17.

***Barking.**—Architectural Assistant (Temporary). For T.C. R. A. Lay, B.E. and S.

***Barking.**—Architectural Draughtsman (Temporary).—For T.C. R. A. Lay, B.E. and S.

***Kent.**—Senior Architect. For C.C. County Architect, Maidstone.

***London.** — Quantity Surveyors' Assistants (temp.).—For L.C.C. Architect, County Hall, S.E.1.

DECEMBER 19.

***Exeter.**—Architectural Assistant.—For T.C. J. Bennett, F.R.I.B.A.

CURRENT AND PROPOSED BUILDING WORK*

Abbreviatons: T.C. for Town Council; U.D.C. for Urban District Council; R.D.C. for Rural District Council; E.C. for Education Committee; B.C. for Borough Council; P.C. for Parish Council; M.H. for Ministry of Health; M.T. for Ministry of Transport; C.B. for County Borough; B. of E. for Board of Education; M.W.B. for Metropolitan Water Board; B.S. for Borough Surveyor; B.E. for Borough Engineer; D.S. for District Surveyor; C. for Clerk; T.C. for Town Clerk; C.E. for County Engineer; C.S. for County Surveyor; S. for Surveyor; E. for Engineer.

Abergele.—S. preparing plans for Council houses, Beelam Field, Abergele-Rhudlian-rd.

Ashington.—Classrooms at Bothal school to be converted into domestic science centre. Architect, W. W. Tasker, County Hall, Newcastle.

Askam Bryan.—West Riding Yorkshire Council for Agricultural Education propose erecting a farm institute providing for 60 pupils at £88,185.

Beckenham.—London C.C. recommend £1,500 in respect of adaptation as staff tenements, etc., of existing stable buildings at Beckenham-place-park.

Beddington and Wallington.—U.D.C. resolved that S. be instructed to report on possibility of improving bridge at Demesne-rd.—Council approved plans by A. Blackman for the redevelopment of site of premises at junction of Stanley-pk. and Woodcote-rds. Plans provided for shops facing Stanley Park-rd. and corner shop at Woodcote-rd., with 17 flats above, and erection of public hall; and for extension to canteen, petrol store and car shelter, for Mitcham Works, Ltd.

Birmingham.—Education Committee recommend additional school accommodation at Woodhouse-rd. Council school, Harborne, at £7,250; purchase of land in Beeches-rd., Perry Barr, at £5,800; pavilions at school playing fields at Hall Green, Northfield, Erdington and Perry Barr, at £4,460; to purchase land from Cadbury Bros. adjoining playing fields of King's Norton secondary school for boys at £200; and to provide a nursery class at Elkington-st. school and additional nursery class at Dartmouth-st. school.—Estates Committee recommend 500 houses; purchasing land fronting to Church-rd. and Deadman's-lane, Yardley; development of Riddings estate, Stechford, and Hutton estate, Yardley, by 486 and 112 dwellings respectively; development of Stonehurst estate, South Yardley, by 146 non-parlour type houses; to sell land situate at rear of "The Old Guy," and 58-60, Digbeth, to Birmingham and Midland Motor Omnibus Co., Ltd.; the offer of Samuel King & Sons, Ltd., to take on lease land in Holt-st., Love-lane and Oxygen-st.; Birmingham Co-operative Society, Ltd., to take on lease land fronting Glebe Farm-rd.; P. R. Garner & Co., Ltd., to take on lease land at corner of Court Oak-rd. and West-boulevard, Harborne; J. L. Bayliss to take on lease land junction of Warwick-rd. and Wharfdale-rd., Tyseley; John Gibbs, Ltd., to take on lease land in Partons-rd., King's Heath; A. A. Howard to take on lease land in Uplands-rd., Handsworth; and F. J. Clamp to take on lease land fronting College-rd., Kingstanding.

Bognor Regis.—Housing Committee propose 50 working-class houses in Westloats-lane.—U.D.C. to invite tenders for development of Marine-pk., including shelters, sunken gardens, etc., at £3,510.

Boston.—Curry's, Ltd., 24 and 28, Goswell-rd., London, E.C.1, propose reconstruction of 18-20, Strait Bargate. Plans by W. J. Dacombe, Lloyds Bank-chams., Boscombe, Bournemouth. Contracts not placed.

Bradford (Yorks).—Corporation inviting tenders for erection of 156 tenement dwellings at Whetley-lane. Plans by City Architect.

Caernarvonshire.—E.C. received sanction to borrowing £3,020 for alterations at Caernarvon County school.

Chailey.—R.D.C. to instruct surveyor to proceed with plans and specifications, and obtain estimates for erection of 48 houses in various parishes.

Chesterfield.—E.C. adopted reorganisation scheme for Brampton schools at £5,000.

Chester-le-Street.—U.D.C. to apply to M.H. for sanction to build another 100 houses for aged people.

Chichester.—R.D.C. authorised additional reservoir at Woodmancote at £1,320.—Work costing £2,895 to be carried out in connection with children's home.

Chorley.—Board of Management of Chorley Joint Hospital propose extensions to isolation hospital, Heath Charnock. T. E. Catterall, architect, 6, St. Thomas-sq. Tenders not yet invited.

Cippenham.—British Hanovia Quartz Lamp Co., Ltd., to build modern factory on Bath-rd. Planning Committee and Slough U.D.C.

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* See also List of Contracts open.

*** In these lists every care is taken to ensure that information given is accurate and up to date, but it may occasionally happen that, owing to building owners taking the responsibility of commencing work before plans are finally approved by the local authorities, "proposed" works at the time of publication have been actually commenced.

Clay Cross.—Building Committee of Methodist Church, High-st., propose alterations to church at £1,000.

Connah's Quay.—Housing Architect, H. Garrett, preparing plans for 122 houses at Kelsterton, for U.D.C.

Corby.—H. H. Surridge, architect, High-st., Kettering, preparing plans for church and school for Congregational Union, to cost £7,500.

Coventry.—T.C. propose extensions to baths at Foleshill. Adshead, Topham & Adshead, 14, Ridgefield, Manchester, architects. Cost £46,000.—Coventry Gauge and Tool Co., Ltd., Earlsdon Works, Earlsdon-st., acquired site off Fletchamstead Highway, Canley, for works.—T.C. approved:—Motor and cycle showrooms, Station-st. East, for W. Lole & Son; shop premises, Cross Cheaping, for Coventry Business Estates, Ltd.; rebuilding of "Heath" hotel, Foleshill-rd., Ansells Brewery, Ltd.; showroom, garage and petroleum filling station, Queen's-rd., J. R. Holbrook; hall, Sunday school, etc., West Orchard, Trustees, West Orchard Congregational Church; 96 houses, 2 new streets, off Awson-st. and Freeman-st., Corporation.—Plans being prepared for works for Modern Machine Tools, Ltd., Butts Works.

Darlington.—Housing Committee has approved scheme by B.S. for 100 houses.

Dartford.—R.D.C. approved application from West Kent Electric Co. for sub-station in Austin Lodge-lane adjacent to Eynsford railway station.—Plans passed:—Bungalows, Abbots Wood, Kingsdown, W. Bennett, St. Margarets, Abbots Wood, Kingsdown.

Dover.—Subject to approval of the Home Office, the T.C. has approved plans for new police station in Ladywell. Cost £19,048.

Dudley.—Rev. J. Ellis, Church of Our Lady St. Thomas, 10, St. Thomas-st., proposes school for senior scholars. B. Cox, F.R.I.B.A., architect, 109, Colmore-row, Birmingham. Contracts not placed.—T.C. approved:—The Wolverhampton and Dudley Breweries, Ltd., Park Brewery; Wolverhampton, licensed premises, Cross-st., Woodside; Webb & Gray, 200, High-st., new hall, St. Francis' Church; Co-operative Society, Ltd., Waddam's Pool, Dudley, bacon-curing factory, West-st.

Durham.—Durham County Water Board to construct a reinforced concrete water tower at Sherburn Hill and tenders invited. Plans by L. G. Mouchel & Partners, Ltd., 25, New Bridge-st., Newcastle.—Plans for conversion of Sedgefield Institution into accommodation for aged females and a colony for female adolescents been prepared. Cost will be nearly £1,000. Plans by C.S., Durham.—Extensions proposed to elementary school at £12,000.—E.C. approved plans for remodelling Helmington-row Council school, Howden-le-Wear Council school (£2,700); and Peases West mixed school (£2,000). Plans by F. Willey, County Architect, 34, Old Elvet, Durham.—Sketch plans for school at Crook to cost £25,000 approved by Durham County E.C. and being forwarded to B. of E. for approval. Plans by F. Willey, County Architect.

Epsom.—U.D.C. considering new building to accommodate School of Art, Library and Museum.

Esher.—Council approved plans for new Molesey Labour Party hall at rear of St. Peter's Hall, Walton-rd., West Molesey.

Failsworth.—U.D.C. propose erection of 24 houses at Wrigley-rd. Plans by J. W. E. Brown, Town Hall.

Gateshead.—R.C. school for 250 scholars to be built in Dryden-rd. Plans by Stienlet & Son, Saville-chams., Newcastle.

Gravesend.—T.C. obtained sanction of M.H. to borrow money to build 201 houses on housing estate at West Court Farm, Chalk.—T.C. approved:—G. E. Wallis & Sons, Ltd., alterations to existing building at The Grove, to form showrooms for Spooner Motors, Ltd.; P. Brockbank, shop and warehouse, 31 and 32, West-st., for B. W. Tolhurst.

Greenfield.—Courtauld's to build factory.

Hampshire.—Mental Health Institutions Committee to erect 30 staff cottages at the Park Prewett Mental Hospital. Cost £14,140.

Hardenhuish.—Wilts. C.C. proposes purchase of park to provide site for secondary school.

Hartford.—Cheshire C.C. proposes new bridge over river to replace existing stone bridge.

Havant.—Surveyor to prepare a lay-out plan for the erection of 30 houses at Emsworth for U.D.C.

Hemsworth.—Pastor Jones, Meadow-rd., Royston, Barnsley, proposes to erect church at South Kirkby. Plans being prepared by J. W. Mellor, Royston, nr. Barnsley. Contracts not let.

Hollesley Bay.—London C.C. recommend £950 for special works at Dunton Farm colony, Hollesley Bay labour colony and London industrial colony.

Horsham.—Housing Committee recommends application for loan of £14,225 for 40 houses at Roffey.

Houghton-le-Spring.—Sanction received by U.D.C. to borrowing of £10,914 for 30 houses by direct labour on Newton estate.

Isle of Ely.—Extensions approved at the Wisbech grammar school. Cost £4,000.

King's Lynn.—Wisbech Wharves, Ltd., to proceed with wharf, warehouses, power station, workshops and plant.

Leeds.—Methodist Building Committee propose erection of church on the Gipton estate. Plans in course of preparation.

Leyburn.—Express Dairy Co., Ltd., Appleby, contemplating milk factory.

Leyton.—T.C. approved:—A. J. Albert, Ltd., motor showroom, 736, Lea Bridge-rd.; J. A. Minty, restoration and addition, Parish Church, "St. Mary the Virgin," Church-rd.; New Model Laundries, Ltd., motor repairs shop at Millas-rd.; Norton Bros. & Co., extension to brush factory (Mason, Pearson & Co., Ltd.), Flempton-rd.—Proposal afoot to rebuild 650 High-rd., Leytonstone.—Town Clerk submitted a letter from N. Davis, stating that he proposes borrowing further money for purpose of completing building on land, corner of High-rd. and Coopers-lane.

Liverpool.—Stevens & Dean, Southport, to erect 80 houses off Moss-lane, Lydiate.

Lockwood (Huddersfield).—Wm. Whiteley & Sons, Ltd., to carry out extensions to their works. Plans have been approved.

London (Bermondsey).—B.C. recommend convenience in Redriff-rd. at £250.—Plans passed: R. Chambers & Co., Ltd., Chambers-wharf, New Church-st., proposed development of property, New Church-st.

London (Camberwell).—B.C. approved:—Bishop & Etherington Smith, addition at 43 to 71, Peckham-grove, S.E.; W. J. L. Horsman, houses between 6-11, Alleyn-park; J. E. Watts, building up rear of 33, Denmark-hill, to abut upon "Joiners' Arms" yard.

London (Fulham).—L.C.C. recommend £140 for installation of two electric bed lifts at Fulham hospital.

London (Islington).—L.C.C. recommend borrowing by B.C. of £5,200 for housing.

London (Lambeth). — B.C. approved:—Wates (Streatham), Ltd., deviation from approved plan of lay-out of site at corner of Leigham Court-rd. and Leaf-grove.—Drainage plans passed:—H. V. Kerr, F.R.I.B.A., flats, 105-7, Hartington-rd.; W. H. Smith & Sons, Ltd., factory, Salamanca-st.

London (Lewisham).—B.C. approved:—H. & J. Taylor, alterations at Ladywell institution, Slagrove-place; J. H. Elmer, hall at rear of 432, High-st., Lewisham; Bunting Construction Co., Ltd., flats and garages, Newton Lodge, West Hill, Sydenham.

London (Poplar).—B.C. recommend application to M.H. for sanction to borrowing £25,098 for buildings and installation of plant in connection with new disinfecting station, smallpox shelter and cleansing station.—Mess-room to be provided at Millwall depot at £175.—Council also recommend remedial measures to flooring of flats at Judkin-st. and Roffey-st. by Acting B.S. at £500.

London (Putney).—M.W.B. recommend £430 for strengthening with tie bars one of roof arches of "high service" reservoir, Putney Heath.

London (Stepney).—L.C.C. recommend borrowing by B.C. of £37,213 for Cable-st. housing scheme.

London (Sydenham).—C. MacLean, flats, Newton Lodge estate, West Hill.

London (Wandsworth).—L.C.C. recommend additional cubical extent at the ex-Columbia Graphophone works, Garratt-lane, Wandsworth, from plans submitted by C. R. Cook.

London (Whitechapel).—L.C.C. recommend £2,350 in respect of acquisition of property adjoining Whitechapel fire station for additions.

London (Woolwich).—L.C.C. recommend borrowing by B.C. of £18,820 for sewerage work.

Mablethorpe.—U.D.C. applied to the M.H. to loan of £10,000 for housing purposes.

Macclesfield.—D. Buxton, builder, Congleton-rd., to develop land in Congleton-rd. for housing site. Plans prepared for 77 houses by P. Wright, King Edward-st.

Madale.—Plans have been approved for erection of "New Dun Bull" hotel by the Manchester Corporation.

Manchester.—T.C. propose 4,125 flats and houses on Bennett-st., Ardwick. Leonard Heywood, A.R.I.B.A., Housing Director, Town Hall.

Mansfield.—T.C. to invite tenders for 52 houses. Plans by Waude Thompson.—Plans approved by T.C.:—17 houses, Carisbrooke-av., Rose, Curtis & Co.; 22 houses, T. Fletcher, Forest-av.

Middlesbrough. — Plans Committee approved scheme for 26 houses. Builders, Dean Bros., Marton-rd.—Laundry to be built behind Rockcliffe-rd. No contracts let.—Houses proposed in Acklam-rd. by W. A. King & Sons, Westbourne-gr., North Ormskirk.—Scheme for further development of land in Acklam-rd. under consideration. Plans for all schemes by Kitching & Co., 21, Albert-rd.

Norham.—U.D.C. proposes 45 houses, Shoreswood Hall farm. J. Paterson, architect.

Northallerton.—Plans approved for extensions to factory at Romanby for Dried Milk Products. The promoters are Cow & Gate, Ltd., Guildford.

Northampton.—B.E. to invite tenders for demolition of buildings in Castle-st area.—Council to invite tenders for 42 tenements, Scarletwell-st. area and 68 tenements on Castle-st. area, and for further 75 non-parlour type houses on the St. David's estate.—Plans passed: 30 residential flats and appurtenant buildings, Derngate, Newilton, Ltd.; electricity sub-station, road No. 15, St. David's (Kingsthorpe) housing estate. Northampton Electric Light & Power Co., Ltd.

Nottingham.—T.C. authorised Mental Hospital and Mental Deficiency Committee to proceed with first portion of extension of Aston Hall Certified Institution at cost of £84,900.

Oxford.—Oxford Union approved conversion of writing-room into dining-room at £1,500.

Pantog.—U.D.C. to build 50 houses, 30 at Kemys Fawr estate at Griffithstown, and 10 at Pontypool, and 10 at Pontymoel.

Portsmouth.—City Council considering £66,000 scheme for market in Oxford-st. and Staunton-st. area.

Rotherham.—M.H. has consented to borrowing by R.D.C. of £41,472 in connection with erection of 130 houses to replace insanitary dwellings.

Rowley Regis.—S. A. Griffiths, 90, High-st., Stourbridge, is preparing plans for shopping centre on the Grace Mary estate, for T.C.

St. Leonards.—Improvements and additions to be carried out at New Palace Pier at £120,000.

St. Neots.—U.D.C. received sanction from M.H. to loan of £5,796 for 20 houses at Nene-crescent.

Seaham.—C. Vaux & Sons, Ltd., brewers, Castle-st, Sunderland, propose new inn on Deneside estate.—U.D.C. to enter into preliminary arrangements for site at junction of Maureen-ter. and Strangford-rd. for new Council offices. J. B. Abbey, S.

Sedgley.—U.D.C. approved plans for 30 houses, Temple-st., J. Horton; 56 houses, Lower Gornall estate, for U.D.C. T. A. Lloyd, F.R.I.B.A., Cardiff.

Sheffield.—E.C. approved £439,375, including pupil teacher centre £63,000, secondary school for girls £60,000, three new schools on Arbourthorne estate, and two new junior schools, and secondary school.—The E.C. are considering two schemes for erection of new centre for pupil teachers at Hurlfield-rd. and a new secondary school at Nether Edge. Total estimated cost £120,000.

Shipley.—Managers of St. Walburga's Roman Catholic school propose junior and infants' school at Windhill.

Southampton.—New physics laboratory proposed at University College at £20,000.

South Shields.—Tenders invited by T.C. for 148 houses, Wenlock-rd., Tyne Dock. Plans by J. Reid, B.E.

Stockton.—M.T. made grant towards cost (£160,000) of bridge to replace level-crossing at Portrack-lane.

Stoke-on-Trent.—T.C. approved:—N.S. Co-operative Dairy, Hanley-rd., Sneyd Green, electricity sub-station; Chatterley-Whitfield Collieries, Ltd., Tunstall, addition to offices.

Sunderland.—Health Committee approved plan for nurses' hostel at municipal hospital. Plans by B.E.—T.C. received notification from M.H. approving 40-bed maternity ward at municipal hospital and 24-bed ward at infectious diseases hospital.—Estates Committee intends proceeding with plunge bath at Hendon-rd. baths at £5,500. Plans by B.E. No contracts placed.—Sleightman & Co., 43, Valley-rd., Sunderland, purchased site for 26 houses on Mere Knoll estate.

Twickenham.—Plans passed by T.C.:—A. Black, flats, off Tower-rd.; H. M. Grellier & Son, 6 shops with 22 flats over, Hampton-rd., with 20 garages at rear; George Heath (Builders), Ltd., 30 houses, Ryecroft-rd.; Marsh & Sinclair, Ltd., 24 flats, The Barons; G. H. Nicholls, 130 houses, Crane Court estate.

Walthamstow.—B.E. and S. to put in hand preparation of necessary drawings and estimates for lavatories at central library.—M.H. sanctioned borrowing by Council of £1,875 for purchase of site of 1-15, Billet-rd., for housing.—Plans passed:—Alterations to church parlour, Shernhall Methodist church, Oliver-rd., A. G. Barton; 16 houses and 6 garages, Elmfield-rd., Chas. Living & Son.

Wellington.—Two schemes for providing 50 new houses at Hadley and 64 at Ketley, by private enterprise, have been approved by R.D.C.

Wem.—U.D.C. to erect 28 houses in Barnard-st.

Whitley Bay.—Improvements to the U.D.C. buildings to be made at £5,000. Architect, A. J. Rousell, S.

Wigan.—Rev. W. H. Vaughan and Parochial Council of Abram Parish Church propose church. Plans by Austen & Paley, AA.R.I.B.A., 34, Castle-hill, Lancaster. Accommodation for 500 persons. Contracts not let.—Rev. W. H. Royden and Parochial Council of St. Catherine's proposing extensions to schools.—Higher Education Committee propose additions to the girls' high school.

Willenhall.—U.D.C. to make application to M.H. for sanction to build 100 houses.

Willington.—U.D.C. to apply for sanction to loan for erection of 60 houses.

Wolverhampton.—Justices approved plans for reconstruction of "Bodega," Dudley-st., for Slater & Bodega, Ltd., 18-24, Kensington High-st., W.8. Architect, S. A. S. Yeo, A.R.I.B.A., Strand-chams., 56, Turnmill-st., London, E.C.1. Estimated cost £11,000 to £12,000. Contracts not placed.—Wolverhampton and Midland Counties Eye Infirmary, Compton-rd., are proposing extensions to their institution. Plans are being prepared.

Worthing.—School for 180 places proposed on site at Broadwater.

York.—T.C. approved:—W. W. Leggett, lay-out of land for 26 houses, Northcote-av.; J. Dodshon & Co., premises, Hull-rd.—Consent of M.H. received to borrowing £5,415 for 24 flats in Lucas-av.

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Owing to the exceptional circumstances which prevail at the present time prices of materials should be confirmed by inquiry

BRICKS, &c.

Per 1,000 Alongside, in River Thames up to Mortlake.

	£ s. d.
Best Stocks	4 2 0
Second Hard Stocks	3 10 0

Per 1,000. Delivered at London Goods Stations.

	£ s. d.		£ s. d.
"Phorpres"	2 11 3	Flettons, B'll'n'se	3 6 3
Flettons at King's Cross	2 11 3	Best Blue Pressed Staffs	8 5 0
Do., grooved for Plaster	2 13 3	Do. Bullnose	8 15 0
		Blue Wire Cuts	7 0 0

White Midhurst Facing Bricks (delivered London site) 5 0 0
"Phorpres" whites (do.) 3 17 3
"Phorpres" Rustic Facing Bricks, delivered Central London ..... per 1,000 3 12 3
Best Stourbridge Fire Brick:—
2½ in. ..... 7 15 0 3 in. 8 15 0

GLAZED BRICKS—

Best White		D'ble Str'tch'rs	29 10 0
Ivory and Salt Glazed		D'ble Headers	26 10 0
Stretcher	21 0 0	One side and two Ends	30 10 0
Headers	20 10 0	Two sides and one End	31 10 0
Quoins, Bull-nose and 4½in.		Splays and Squints	28 0 0
Flats	27 10 0		

Second Quality, £1 per 1,000 less than best. Cream and buff, £2 extra over white. Other colours. Hard Glaze, £5 10s. extra over white.

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CLINKER CONCRETE.

2" per yd. sup.	1 6	3" per yd. sup	2 0
2½" " "	1 8	4" " "	2 4

CRANHAM TERRA COTTA.

2" per yd. sup.	3 0	3" per yd. sup.	3 8
2½" " "	3 6	4" " "	4 7

HEMPSTEAD—KEYED TWO SIDES.

12" x 9" x 2"	2 3	12" x 9" x 3"	2 9
12" x 9" x 2½"	2 6	12" x 9" x 4"	3 6

Per yard super d/d. Free on site, London.

	s. d.	
Thames Ballast	7 3 per yd.	delivered 2 miles radius Paddington.
Pit Ballast	6 3 " "	
Pit Sand	7 9 " "	
Washed Sand	8 3 " "	
¾ in. Shingle	7 3 " "	
¾ in. Broken Brick	11 3 " "	
Fan Breeze	8 3 " "	

CEMENT.

Best British Portland Cement, Standard Specification, delivered London Area in jute sacks (11 to ton), or paper bags (20 to ton) free (non-returnable):—

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4 ton loads and upwards site ..... Per ton.	1 18 0
1 ton to 4 tons site	2 0 0
Alongside Vauxhall in 80-ton lots	1 14 0
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4 ton loads and upwards site	2 4 0
1 ton to 4 tons site	2 6 0
Alongside Vauxhall in 80-ton lots	2 0 0

NOTE.—Jute sacks are charged 1s. 6d. each and credited 1s. 6d. nett if returned in good condition within three months, carriage paid.

"Colorcrete" Nos 1 and 2 Coloured Rapid Hardening Portland Cement in 1 cwt. paper bags free (non-returnable) in 1-ton lots and upwards site	3 6 0
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Super Cement (Waterproof) paper bags free	3 8 0
Roman Cement	6 15 0
Parian Cement	5 15 0
Keene's Cement, White	5 15 0
" " Pink	5 10 0

PLASTER.

Plaster, Coarse, Pink	2 12 0
" " White	2 17 6
" Fine	5 0 0
Sirapite, Coarse	3 5 0
" Finish	3 13 0
Grey Stone Lime	2 2 0
Chalk Lime	2 2 0
Best Ground Blue Lias Lime	1 17 6
Hair ..... per cwt.	2 2 6
Granite Chippings	1 12 0

NOTE.—Sacks are charged 1s. 9d. each and credited 1s. 6d., if returned in good condition within three months carr. pd.

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STONE.

	s. d.
BATH STONE.—Delivered in railway trucks at Westbourne Park, Paddington, G.W.R., or South Lambeth, G.W.R., per ft. cube	2 10
BEER STONE—RANDOM BLOCK— Free on rail at Seaton Station, per ft. cube..	2 8
Delivered free on rail Nine Elms, S.R. per ft. cube	3 1½
Selected approximate size one way, 1d. per cubic foot extra; selected approximately three sizes or for special work, 3d. per cubic foot extra.	
PORTLAND STONE— Brown Whitbed, in random blocks of 20ft. average, delivered in railway trucks at Nine Elms, S. Rly., South Lambeth Station, G.W.R., and Westbourne Park, Paddington, G.W.R., per ft. cube	4 4½
Do. do. delivered on road waggons at above stations, per ft. cube	4 5½
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NOTE.—1d. per ft. cube extra for every foot over 20 ft. *average*, and ½d. beyond 30 ft.	
HOPTON-WOOD STONE— F.O.R. Quarries Wirksworth, Derbyshire, Random blocks from 10ft. and over P.ft.cb.	s. d. 14 0
Sawn two sides	22 6
HOPTON-WOOD STONE— Sawn, three or four sides	27 9
CHILMARK—RANDOM BLOCK— At Nine Elms, per ft. cube	3 11

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Delivered at any Goods Station London.	
6 in. sawn two sides landings to sizes (under 30 ft. super) ..... Per ft. super	5 6
6 in. rubbed two sides, ditto ..... "	6 0
3 in. sawn two sides slabs (random sizes), "	2 3½
2 in. to 2½ in. sawn one side slabs (random sizes) ..... "	1 6½
1½ in. to 2 in., ditto ..... "	1 3½

HARD YORK—

Delivered at any Goods Station, London.	
Scappled random blocks ..... Per ft. cube	6 3
6 in. sawn two sides landing to sizes (under 40 ft. super) ..... Per ft. super	5 1½
6 in. rubbed two sides, ditto .. "	6 1½
4 in. sawn two sides slabs (random sizes), "	3 1½
3 in. ditto ditto "	2 8
2 in. self-faced random flags .. Per yd. super	7 6

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Delivered in London area in full van loads, per ft cube: Plain, 8s. 6d.; Moulded, 9s. 6d.; Cills, 10s. 0d.

SOFT WOOD.

GOOD BUILDING DEAL.

Inches.	Per stan.	Inches.	Per stan.
4 × 11	£23 10	3 × 6	£18 10
4 × 9	22 10	3 × 11	19 10
4 × 8	21 0	2 × 11	19 10
4 × 7	19 0	3 × 9	19 10
3 × 8	18 0	2½ × 9	19 10
3 × 7	18 10	3 × 4½	18 0
2½ × 7	18 10	3 × 4	18 0
		PLANED BOARDS.	
1 × 11	£22 10	1 × 9	£21 0

PLAIN EDGE FLOORING.

Inches.	per sq.	Inches.	per sq.
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¾	17/-	1¾	32/6
1	20/-		

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1	21/-	Inches.	per sq.
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		1	22/6

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Dry sq. edged Honduras Mahogany, per ft. cube	0 14 0
Dry log-cut Honduras Mahogany, per ft. cube	0 16 0
Dry Cuba Mahogany, per ft. cube	1 1 0
Dry Teak, per ft. cube	0 14 0
Dry American Whitewood, per ft. cube	0 10 0
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Liquid Glue, per cwt.	4 7 0 to 5 10 0

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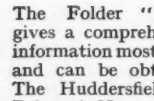

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20 by 10 ..	19 7 6		

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JOISTS, GIRDERS, &c., TO LONDON STATION, PER TON—

R.S. Joists, cut and fitted	£11 10 0
Plain Compound Girders	13 10 0
" Stanchions	15 0 0
In Roof Work	18 10 0

MILD STEEL ROUNDS.—To London Station, per ton.

Diameter.	£ s. d.	Diameter.	£ s. d.
½ in.	12 0 0	⅝ in. to ½ in.	10 15 0
⅜ in.	11 0 0	⅝ in. to 2⅜ in. ..	10 10 0

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(Discount off List for lot of not less than £7 net value delivered direct from Works, 2½ per cent. less above gross discounts, carriage forward, if sent from London Stocks.)

	Standard Wrot. Mild Steel Tubes and Tubulars Sizes ¼in. to 6in. %	Genuine Wrot. (Puddled) Iron Tubes and Tubulars Sizes ¼in. to 6in. %	Standard Fittings Sizes ¼in. to 6in. %	Standard Flanges Sizes ¼in. to 6in. %
Gas	65	52½	57½	70
Water ..	61½	48½	52½	65
Steam ..	57½	45	47½	60
Galv. gas..	52½	40	47½	60
Galv. water	47½	35	42½	55
Galv. steam	42½	30	37½	50

C.I. HALF-ROUND GUTTERS—London Price ex Works

Per yd. in 6 ft. lengths.	Gutters.	Angles and Nozzles.	Stop Ends.
3 in.	1/5½	1/1½	4½d.
3½in.	1/6½	1/3	5½d.
4 in.	1/6¾	1/4½	6½d.
4½in.	1/8	1/6½	9½d.
5 in.	1/10½	1/8½	10d.

O.G. GUTTERS.

3 in.	1/7½	1/5½	7d.
3½in.	1/9½	1/5½	7½d.
4 in.	1/11	1/6½	8½d.
4½in.	2/0	1/9½	9½d.
5 in.	2/4½	2/0½	11½d.

RAIN WATER PIPES, &c.

Per yd. in 6 fts.	Pipe.	Bends, stock angles.	Branches, stock angles.
2 in.	2/2½	1/4½	2/0
2½in.	2/3½	1/6½	2/4½
3 in.	2/9½	1/11	2/10½
3½in.	3/3½	2/3½	3/3½
4 in.	3/9	2/9	4/0½

Less 20 per cent. trade discount.

Tonnage allowance—4 ton lots, 5 per cent.
2 ton lots, 2½ per cent.

L.C.C. COATED SOIL PIPES—London Prices ex Stock.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2 in. per yd. in 6 fts.	2 8	1 11	2 3
2½in. " ..	3 0	2 1	2 10
3 in. " ..	3 4	2 3	3 5
3½in. " ..	3 7½	2 10	3 11
4 in. " ..	4 0	3 2	4 6

L.C.C. COATED DRAIN PIPES—London Prices ex Stock.

	Pipe.	Bends, stock angles.	Branches, stock angles.
	s. d.	s. d.	s. d.
2in. per yd. in 9 ft. lengths	3 0	4 6	7 0
cwt. qr. lbs.			
4 in. " 1 1 20 ..	4 9	5 6	8 9
5 in. " 1 2 22 ..	5 10	9 6	13 6
6 in. " 2 0 6 ..	6 10	12 0	18 0

Gaskin for jointing 41/- per cwt.

IRON—	Per ton in London. £ s. d.		£ s. d.
Common bars	10 0 0	to	10 10 0
Staffordshire Crown Bars—			
Good merchant quality ..	10 10 0	to	11 0 0
Staffordshire Marked Bars..	14 0 0	..	15 0 0
Mild Steel Bars	9 0 0	..	10 0 0
Steel Bars, Ferro-Concrete quality, basis price	8 10 0	..	9 0 0
Hoop iron, basis price	11 0 0	..	12 0 0
" Galvanised	27 10 0	..	28 10 0

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PRICES CURRENT OF MATERIALS—(*contd.*).

IRON—	Per ton in London. £ s. d.	£ s. d.
Soft Steel Sheets, Black—		
Ordinary sizes, to 20 g.	11 0 0 ..	11 10 0
,, ,, ,, 24 g.	12 0 0 ..	13 0 0
,, ,, ,, 26 g.	14 0 0 ..	15 0 0
Sheets Flat Best Soft Steel, C.R. and C.A. quality—		
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g. ..	14 0 0 ..	15 0 0
Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 22 g. and 24 g.	15 0 0 ..	16 0 0
Ordinary sizes, 6 ft. by 2 ft to 3 ft. to 26 g.	17 10 0 ..	18 10 0
No 1 quality £4 per ton extra.		
Flat and Galvanised Corrugated Sheets—		
Ordinary sizes, 6 ft. to 9 ft. to 20 g.	13 10 0 ..	15 0 0
Ordinary sizes, 6 ft. to 9 ft. to 22 g. and 24 g...	15 10 0 ..	16 10 0
Ordinary sizes, 6 ft. to 9 ft. to 26 g.	16 10 0 ..	18 0 0
Sheets, Galvanised Flat, Best quality—		
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. to 20 g. and thicker	14 10 0 ..	16 10 0
Best Soft Steel Sheets, 22 g. and 24 g	15 0 0 ..	17 0 0
Best Soft Steel Sheets, 26 g.	16 10 0 ..	18 0 0
Cut Nails, 3 in. to 6 in.	15 10 0 ..	17 0 0
(Under 3 in. usual trade extras.)		

METAL WINDOWS.—Standard sizes, suitable for complete houses, including all fittings, painting two coats, and delivery to job, average price about 1s. 4d. to 1s. 7d. per foot super.

COPPER.

		s. d.
Seamless Copper tubes (basis)	per lb.	0 9
Strong sheet	,,	0 10
Thin	,,	0 11
Copper nails	,,	1 0
Copper wire	,,	0 11

PLUMBERS' BRASS WORK.

Delivered in London.

NEW RIVER PATTERN SCREW DOWN BIB COCKS FOR IRON.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
29/-	45/-	76/-	153/-	246/-	510/- per doz.

NEW RIVER PATTERN SCREW DOWN STOP COCKS AND UNIONS.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.	2 in.
41/6	62/-	92/-	174/-	300/-	588/- per doz

RIVER PATTERN SCREW DOWN MAIN FERRULES.

½ in.	¾ in.	1 in.
39/-	60/-	116/6 per doz.

CAPS AND SCREWS.

1¼ in.	1½ in.	2 in.	3 in.	3½ in.	4 in.
7/6	10/-	14/-	23/-	30/-	42/- per doz.

DOUBLE NUT BOILER SCREWS.

½ in.	¾ in.	1 in.	1½ in.	1¾ in.	2 in.
7/6	11/-	17/-	29/-	36/-	63/- per doz.

BRASS SLEEVES.

1½ in.	2 in.	3 in.	3½ in.	4 in.
10/-	12/-	20/-	24/-	31/- per doz.

NEW RIVER PATTERN CROYDON BALL VALVES S.F.

½ in.	¾ in.	1 in.	1¼ in.	1½ in.
35/-	56/-	98/-	162/-	228/- per doz.

DRAWN LEAD P. & S. TRAPS WITH GLASS CLEANING SCREW.

	1¼ in.	1½ in.	2 in.	3 in.
8 lbs. P. traps ..	33/-	41/-	56/-	101/- per doz.
8 lbs. S. traps ..	35/-	45/-	66/-	126/- ,,

TIN.—English Ingots, 2/5 per lb. SOLDER.—Plumbers' 1/-, Tinmen's, 1/2, Blowpipe, 1/3 per lb.

LEAD, &c.

(Delivered in London.)	£ s. d.
LEAD—Sheet, English, 4 lb. and up	18 0 0
Pipe in coils	16 10 0
Soil pipe	24 10 0
Compo pipe	25 0 0

NOTE.—Country delivery, 20s. per ton extra; lots under 3 cwt. 4s. per cwt. extra, and over 3 cwt. and under 5 cwt., 2s. 6d. per cwt. extra. Cut to sizes, 4s. cwt. extra.

Old lead, ex London area, at Mills.....per ton } £9 0 0

PAINTS, &c.

	£ s. d.
Raw Linseed Oil, in pipes .....per gallon	0 2 6
,, ,, ,, in barrels ..... ,,	0 2 8
,, ,, ,, in drums ..... ,,	0 2 11
Boiled ,, ,, in barrels ..... ,,	0 2 9
,, ,, ,, in drums ..... ,,	0 2 11
Turpentine, in barrels ..... ,,	0 4 3
,, in drums (10 galls.) ,,	0 4 5
Genuine Ground English White Lead, per ton (In not less than 5-cwt. casks.)	43 0 0

Extra for 1-cwt. kegs over 5-cwt. casks is 5/9 cwt.

GENUINE WHITE LEAD PAINT.

"Father Thames," "Nine Elms," "Park," "Supremus," "St. Paul's," "Morganswyte," "Polacco," "J" Brand, and other best brands (in 14-lb. tins) not less than 5-cwt. lots per ton delivered	£ s. d. 61 0 0
Red Lead, Dry (packages extra) ..... per ton	31 0 0
Best Linseed Oil Putty .....per cwt.	0 13 6
Size. XD quality ..... fkn.	0 3 0

VARNISHES, &c.

	Per gallon
Oak Varnish .....Outside	0 14 0
Fine Do. ..... Do.	0 16 0
Fine Copal ..... Do.	0 18 0
Pale Copal ..... Do.	1 0 0
Pale Opal Carriage ..... Do.	1 4 0
Best Do. ..... Do.	1 12 0
Floor Varnish ..... Inside	0 18 0
Fine Pale Paper ..... Do.	0 18 0
Fine Copal Cabinet ..... Do.	1 2 0
Fine Copal Flatting ..... Do.	1 0 0
Hard Drying Oak ..... Do.	0 18 0
Fine Hard Drying Oak ..... Do.	0 19 6
Fine Copal Varnish ..... Do.	1 0 6
Pale Do. ..... Do.	1 12 0
Best Do. ..... Do.	1 2 6
Best Japan Gold Size	0 12 6
Best Black Japan	0 10 0
Oak and Mahogany Stain (water)	0 12 0
Brunswick Black	0 7 6
Berlin Black	0 14 0
Knotting (patent).....	0 15 0
French and Brush Polish	0 12 0
Liquid Dryers in Terebene	0 9 0
Cuirass Black Enamel	0 7 0

GLASS.

ENGLISH SHEET GLASS IN CRATES OF STOCK SIZES.

	per ft.		per ft.
15 oz. fourths ..	2¾d.	32 oz. fourths	6½d.
15 ,, thirds	2¾d.	32 ,, thirds	8½d.
21 ,, fourths ..	3½d.	Obscured Sheet, 15 oz.	3d.
21 ,, thirds	3¾d.	,, ,, 21 ,,	4½d.
26 ,, fourths ..	4½d.	Fluted, 15 oz. 6½d., 21 oz.	9d.
26 ,, thirds	5¾d.	Em'lld, 15 oz. 4½d., 21 oz.	5½d.

Extra price according to size and substance for squares cut from stock.

ENGLISH ROLLED plate in CRATES OF STOCK SIZES.

	Per ft.
Rolled plate ¼ in.	4½d.
Rough rolled ⅜ in.	5½d.
Rough rolled ½ in.	5½d.
Figured, Rolled, Baltic, Oceanic, Arctic, Stippolyte, and small and large Flemish White	5½d.
Do. tinted	8d.
Rolled Sheet	4½d.
White Rolled Cathedral	5d.
Tinted Do.	7½d.

Cast plate is same price as rough rolled.

"VITA" GLASS.	Per ft. s. d.
Clearsheet—not exceeding 1 foot	1 0
Do. do 2 feet	1 3
Do. over 2 feet	1 9
Polished plate—not exceeding 1 foot	1 6
Do. do. 2 feet	3 0
Cathedral—not exceeding 1 foot	1 0
Do. larger sizes.....	1 6
Horticultural Sheet and Cathedral "Vita" Glass. Sizes up to 24 inches by 18 inches or not exceeding 3 feet	1 0
3/16 in. Wired Georgian Design. Sizes up to 96 inches long by up to 24 inches wide.....	2 6

BUILDING TRADE WAGES IN SCOTLAND*

Following are grade rates authorised by the Scottish N.J.C. for Building Industry. Painters by ruling of the Scottish National Painters' and Decorators' Joint Council, have from January 1 new rates. Grade A towns, 1/6 per hour; Grade B, 1/4; Aberdeen has a special rate of 1/5½. The new rate for Plasterers has been fixed at 1s. 6½d. Every endeavour is made to ensure accuracy, but we cannot be responsible for errors that may occur.

Grade Classification	A	A¹	A²	A³	B	B¹	B²	B³
Craftsmen	1/6	1/5½	1/5	1/4½	1/4	1/3½	1/3	1/2½
Labourers	1/1½	1/1½	1/0½	1/0½	1/0	/11½	/11½	11

Aberdeen.....A	Dundee .....A	Hawick .....A²	Perth .....A		
Airdrie.....A	Dunfermline ....A	Helensburgh ....A	Perthshire .....A²		
Alexandria ....A	Dunoon .....A	Inverness .....B	Peterhead .....A²		
Arbroath .....A²	East Lothian ....A	Kilmarnock .....A	Renfrewshire ....A		
Ayrshire .....A	Edinburgh .....A	Kincardineshire A²	Rothesay .....A		
Bathgate .....A	Falkirk .....A	Kinross-shire ....A	Roxburghshire ..A²		
Bo'ness .....A	Forfarshire ....A²	Kirkcaldy .....A	St. Andrews ....A		
Broughty Ferry A	Fort William ..B	Lanarkshire .....A	Selkirkshire ....A		
ClackmannanshireA	Galashiels .....A²	Leith .....A	Stirling .....A		
Coatbridge ....A	Glasgow .....A	Midlothian .....A	Stirlingshire, West A		
Dumbartonshire A	Greenock .....A	Motherwell .....A	West Lothian ..A		
Dumfries .....A²	Hamilton .....A	Peeblesshire ....A²	Wishaw .....A		
Dumfriesshire ..A²					

* The information given in this table is copyright. The rates of wages in various towns in England and Wales are given on page 1000.

NEW BUILDINGS IN SCOTLAND

ABERDEEN.—SCHOOL.—At Seaton a new school is to be built by the T.C.

ABERDEENSHIRE.—HOUSES.—C.C. have approved the lay-out plan of three blocks of houses at Birse, and also to the site for two houses at Sandhaven.

AIRDRIE.—HOUSES.—The T.C. have decided to erect 98 new houses at Forrest-street and Colliertree-road, Clarkston, at £30,000.

BELLSHILL. — EXTENSION. — A building scheme for the reconstruction of the Airdrie Savings Bank's premises in Main Street, Bellshill, to commence shortly.

BUCKHAVEN.—BATHS.—A scheme for public swimming baths costing £8,000 has been submitted by the T.C. to the Miners' Welfare Board.

DUNDEE.—BRIDGE.—The Works Committee of the Harbour Trust have approved of the offer of Messrs. Thomas Gebbie and Co., Ltd., to carry out the construction of the new road bridge over the Dundee and Arbroath Joint Railway at Roodyards.

DUNDEE.—BUILDINGS.—Plans and sections of the following proposed new buildings, etc., have been lodged at the office of the City Engineer: — Collingwood-street: bungalows for N. W. Laburn, architect J. Clunie,. 5, Kirkton-road; 89-95, Commercial-street: alterations for the T.C.; Overgate: alterations for Alex. Munro (Butchers), Ltd., architects, Thoms & Wilkie, 21, South Tay-street; Panmure-terrace: garage for Dundee Royal Infirmary, architects Johnston and Baxter, 114, Seagate; 62-64, Wellgate: alterations for Andrew G. Kidd, Ltd., architects, Mills & Shepherd, 9, South Tay-street.

DUNDEE.—SCHOOL.—The proposal to erect a new Roman Catholic school in Dundee at a cost of £85,765 was agreed to by the E.C.

DUMFRIES.—EXTENSION.—A special meeting of the Court of Governors of the Dumfries and Galloway Royal Infirmary agreed to proceed with a scheme of extension of the infirmary. It is estimated that the cost of the extension contemplated will be between £60,000 and £70,000.

EDINBURGH. — BUILDING. — The following warrants were granted :—The Edinburgh College of Domestic Science, alterations at 2-4, Atholl Crescent-lane; and Alexander Glass, 11 shops and 12 houses at corner of Gorgie-road and Balgreen-road.

EDINBURGH.—INFIRMARY.—Plans for the new maternity hospital in connection with Edinburgh Royal Infirmary extension scheme were before Edinburgh Dean of Guild Court, when it was stated that the estimated cost of the work is £130,000.

FALKIRK. — HOUSING. — Plans submitted for two large housing schemes which will involve £30,000 were passed at a sitting of Falkirk Dean of Guild Court. The petitioners were the Town Council, and 114 houses will be erected by them in the Camelon and Bainsford areas. The T.C. also presented a petition to take down the existing lodge at Dollar Park, Camelon-road, and erect a new one at a cost of £460.

FALKIRK.—HOUSING.—The Burgh Surveyor submitted to the T.C. a lay-out for approximately 800 houses in Bog-road.

GLASGOW.—CHURCH.—Plans for a new church, to be erected in Helenvale-street, Parkhead, by the General Trustees of the Church of Scotland were approved by the Dean of Guild Court. The plans also include the erection of church halls and offices. —The Corporation Housing department submitted plans for the construction of more than 640 dwelling-houses in three different housing schemes. At Blochairn-road, 232 dwellings will be built, consisting of 24 houses of two apartments, 160 of three apartments, and 48 of four apartments. Fulton-street, in the north-western district of the city, will house the largest block; there 301 houses will be constructed of three apartments and 91 of four apartments. The remainder of the programme is scheduled for Bardowie-street, where the department will

(*Continued on page* 1007)

CURRENT PRICES FOR BUILDING WORK IN LONDON*

EXCAVATOR.

		s.	d.
Digging and throwing or wheeling and filling carts, and carting away to shoot—6 ft. deep	per yard cube	8	9
Add if in clay	,, ,,	1	0
Add for every additional depth of 6 ft.	,, ,,	0	6
Planking and strutting to trenches	per foot super	0	3
Do. to sides of excavation, including shoring	,, ,,	1	0

CONCRETOR.

Portland cement concrete in foundations 1 to 6	per yard cube	24	3
Add if in underpinning in short lengths	,, ,,	5	6
Add if in floors 6 in. thick	,, ,,	2	3
Add if in beams	,, ,,	2	9
Add if aggregate 1 : 2 : 4	,, ,,	9	0
Add for hoisting not exceeding 10 ft. beyond the first 10 ft.	,, ,,	2	0

BRICKLAYER.

		£	s.	d.
Reduced brickwork in lime mortar and Fletton bricks	per rod	27	0	0
Add if in stocks	,,	7	0	0
Add if in Staffordshire blues	,,	22	0	0
Add if in Portland cement and sand	,,	1	5	0

FACINGS.

Extra for facing in English or Flemish bond for every 10s. per 1,000 over the price of the common bricks	per ft. super	0	0	1½

POINTING.

Neat flat struck or weathered joint	,, ,,	0	0	3

ARCHES.

Extra only to the price of ordinary brickwork :—				
Fair external in half brick rings	,, ,,	0	0	10
Axed in stocks	,, ,,	0	0	9
Rubbed and gauged jointed in putty camber or segmental	,, ,,	0	6	0

SUNDRIES.

Damp course in double course of slates breaking joint and bedded in Portland cement	,, ,,	0	0	11
Setting ordinary register grates and stoves	each	1	0	0
Setting kitchener, including forming flues, &c., with all necessary fire bricks	,,	4	15	0

ASPHALTER.

		s.	d.
Half-inch horizontal damp course	per yard super	4	6
Three-quarter-inch vertical damp course	,, ,,	9	6
Three-quarter-inch on flats in two thicknesses	,, ,,	6	0
Angle fillet	per foot run	0	3
Skirting and fillet 6 in. high	,, ,,	1	0

MASON.

York stone templates fixed	per foot cube	12	9
York stone sills fixed	,, ,,	22	0
Bath stone and all labour fixed	,, ,,	10	6
Beer stone and all labour fixed	,, ,,	15	0
Portland stone fixed	,, ,,	15	6
Chilmark stone fixed complete	,, ,,	16	6

SLATER.

Welsh 16 in. × 8 in. 3 in. lap. including nails	per square	70	0
Do. 20 in. × 10 in. Do. Do.	,,	71	6
Do. 24 in. × 12 in. Do. Do.	,,	73	6

CARPENTER AND JOINER.

Fir framed in plates	per foot cube	4	0
Do. joists	,, ,,	4	6
Do. roofs, floors and partitions	,, ,,	5	0
Do. trusses	,, ,,	7	3

		¾″	1″	1¼″	2″
Deal rough close boarding	per sq.	30/-	35/-	43/-	70/-

Flat centering for concrete floor, including struts or hangers	,,	50	0	
Do. to beams	per ft. sup.	0	9	
Centre for arches	,,	1	6	
Gutter boards and bearers	,,	1	0	

FLOORING.		¾″	1″	1¼″	1½″
Deal-edges shot	per sq.	—	38/-	45/-	52/-
Do. tongued and grooved	,,	—	43/-	50/-	58/-
Do. matchings	,,	40/-	45/-	—	—
Moulded skirtings, including backings and grounds	per ft. sup.	1/4	1/7	1/9	2/3

SASHES AND FRAMES.		s.	d.
One-and-a-half moulded sashes or casements	per foot super	1	10
Two Do. Do. Do.	,, ,,	2	1
Add for fitting and fixing	,, ,,	0	3
Deal cased frames with 1 in. inner and outer linings, 1½ in. pulley stiles tongued to linings, hard wood sills with 2 in. moulded sashes in squares, double hung, double hung with pulleys, lines and weights, average size		3	6

DOORS.		1½″	1¾″	2″
Two-panel square framed	per ft. sup.	2/1	2/3	2/5
Four-panel Do.	,,	2/4	2/6	2/9
Two-panel moulded both sides	,,	2/6	2/9	2/11
Four-panel Do. Do.	,,	2/9	2/11	3/2

CARPENTER AND JOINER—continued.

FRAMES.

		s.	d.
Deal wrot moulded and rebated	per foot cube	12	6

		1″	1¼″	1½″
Plain deal jamb linings framed	per ft. sup.	1/7	1/8	1/11
Deal shelves and bearers	,,	1/2	1/4	1/7
Add if cross-tongued	,,	2d.	2d.	2d.

STAIRCASES.

	1″	1¼″	1½″	2″	2½″
Deal treads and risers in and including rough brackets	2/1	2/4	2/9	—	—
Deal strings wrot on both sides and framed	1/8	2/-	2/2	2/8	—

		s.	d.
Housings for steps and risers	each	0	11
Deal balusters, 1 in. x 1¼ in.	per ft. run	0	9
Mahogany handrail, average 3 in. x 3 in.	,, ,,	6	0
Add if ramped	,, ,,	12	0
Add if wreathed	,, ,,	24	0

FIXING ONLY IRONMONGERY (INCLUDING SCREWS).

6 in. barrel bolts	8½d.	Rim locks	2/-
Sash fasteners	11½d.	Mortice locks	4/6
Casement fasteners	1/5	Patent spring hinges and letting into floor and making good	19/-
Casement stays	1/2		
Cupboard locks	1/5		

FOUNDER AND SMITH.

		s.	d.
Rolled steel joists	per cwt.	15	0
Plain compound girders	,,	18	0
Do. stanchions	,,	20	9
In roofwork	,,	26	6

RAIN-WATER GOODS.

		3″	4″	5″	6″
Half-round plain rebated joints	ft. run	1/-	1/1	1/3	1/6
Ogee Do. Do.	,,	1/2	1/3	1/9	2/3
Rain-water pipes with ears	,,	1/3	1/10	—	—
Extra for shoes and bends	each	2/9	3/11	—	—
Do. stopped ends	,,	1/1	1/4	1/9	2/6
Do. nozzles for inlets	,,	2/2	2/7	3/7	4/-

PLUMBER.

		s.	d.
Milled lead and laying in flashings and gutters	per cwt.	38	0
Do. do. flats	,,	37	0
Extra labour and solder in coated cesspools	each	6	9
Welt joint	per ft. run	0	6
Soldered seam	,, ,,	1	3
Copper nailing	,, ,,	0	3

		½″	¾″	1″	1¼″	2″	4″
Drawn lead waste	per ft. run	11½	1/4	1/6½	2/5	2/8	—
Do. service...	,,	1/3	1/9	2/-	3/-	—	—
Do. soil	,,	—	—	—	—	—	5/9
Bends in lead pipe	each	—	—	—	—	2/6	6/-
Soldered stop ends	,,	0/9	1/1	1/6	2/3	2/10	—
Red lead joints	,,	0/10	0/11	1/2	1/9	2/1	4/3
Wiped soldered joints	,,	2/3	2/9	3/0	3/10	4/10	6/9
Lead traps and cleaning screws	,,	—	—	—	10/6	14/-	—
Bib cocks and joints	,,	6/4	9/7	14/-	—	—	—
Stop cocks and joints	,,	12/4	14/2	20/8	54/-	—	—

PLASTERER.

				s.	d.
Render, float and set in	lime and hair	per yard sup.		2	0
Do. Do.	Sirapite	,,	,,	2	3
Do. Do.	Keen's	,,	,,	3	0
Add saw lathing		,,	,,	1	4
Add metal lathing		,,	,,	2	4
(Not including hangers or runners, etc., for suspended ceilings.)					
Portland cement screed		,,	,,	2	2
Do. plain face		,,	,,	3	3
Mouldings in plaster		per 1 girth		0	1½
One-and-a-half granolithic pavings		per yard sup.		4	6

GLAZIER.

				s.	d.
21-oz. sheet plain		per foot sup.		0	6½
26-oz. Do.		,,	,,	0	7½
Obscured sheet		,,	,,	0	8
⅛-in. rolled plate		,,	,,	0	9
¼-in. rough rolled or cast plate		,,	,,	0	10
¼-in. wired cast plate		,,	,,	1	1

PAINTER.

				s.	d.
Preparing and distempering, 2 coats		per yard sup.		0	9
Knotting and priming		,,	,,	0	7
Plain painting, 1 coat		,,	,,	0	9
Do. 2 coats		,,	,,	1	2
Do. 3 coats		,,	,,	1	9
Do. 4 coats		,,	,,	2	4
Graining		,,	,,	2	3
Varnishing twice		,,	,,	1	9
Sizing		,,	,,	0	3
Flatting		,,	,,	0	7
Enamel		,,	,,	1	1
Wax polishing		per foot sup.		0	6
French polishing		,,	,,	1	2
Preparing for and hanging paper		per piece	2/- to		4/-

* These prices apply to *new buildings only*. They cover superintendence by foreman and carry a profit of 10% on the prime cost without establishment charges. A percentage of 1½ should be added for Employers' Liability and National Health and Unemployment Act, and from 1s. 6d. per £100 for Fire Insurance. The whole of the information given on this page is copyright.

SCOTLAND —(*Continued from page* 1005). proceed with 18 dwellings of four apartments. Another Corporation scheme was for alterations and additions to the fire station at headquarters, Ingram-street—Additions to the chemical factory of the Scottish Co-operative Wholesale Society at Bogmoor-road were also sanctioned, and for T. F. Beckett and Co., (Fairistych), Ltd., 20, Renfrew-street, steel-framed needlework factory at Ruchill-street.

GLASGOW.—FACTORY.—Mr. J. Fraser, of the Glasgow and District Development Board, stated that the Levernshields Works, Nitshill, had been acquired by the Sure-Arc Electrode Co., Ltd., for the manufacture of electrodes for electric arc welding.

GREENOCK.—HOUSING.—Plans for the corporation's housing scheme in the Gibbshill area were passed at the Dean of Guild Court. The scheme comprises 840 houses and will cost about £250,000.

INVERNESS.—SCHOOL. — County Education Committee have decided to erect a new school in the island of Skye.

LANARK.—DRAINAGE.—The C.C. has decided to proceed with the drainage scheme in the Baillieston area. The estimated cost of the scheme is over £22,000.

LARGS.—BUILDING.—The Dean of Guild Court has passed plans for work estimated to cost more than £20,000. This includes additions to Largs higher grade school, to cost £8,500, and 20 bungalows, to cost £11,600.

MONTROSE. — HOUSES. — The Dean of Guild Court has granted permission to the T.C. to erect 32 houses at Provost Reid-road.

NEWBATTLE.—HOUSING.—The District Council have decided to erect 100 new houses at Gowkshill, Gorebridge, and an additional 150 houses at their Newtongrange housing scheme.

TRADE NEWS

White Facing Bricks.

Architects who use white facing bricks should be interested in a white brick, "Burwell Whites," which is rapidly gaining in popularity. This brick has been manufactured for nearly a century and is pressed from gault, which is ground, shaped and pressed by machinery, and fired in special kilns. The result is a cream-coloured brick of most pleasing texture, which may be used wherever light reflection is essential. Their durability is said to be excellent. The sole manufacturers are Messrs. Fison, Packard and Prentice, Ltd., of Ipswich, who have stocks always on hand for immediate dispatch. "Burwell Whites" are priced at from £3 17s. 6d. to £4 5s. per 1,000, delivered to any site in the London area.

Floodlighting of Gloucester Cathedral.

Just recently, in view of a national musical festival recently held at Gloucester, the cathedral authorities gave facilities to the Electricity Department of the Gloucester Corporation so that the beautiful tower could be floodlighted in time to synchronise with this event. The scheme of lighting was supervised by the cathedral architect, Colonel H. H. Waller, and carried out by the Gloucester Corporation Electricity Department, under its Chief Engineer, Mr. F. H. Carson, M.I.E.E., M.Inst.C.E., with whom the Illuminating Engineering Department of the G.E.C. collaborated. So successful was the installation that people returning late from the hills and outlying villages saw the whole country-side dominated by the beams flung upon the tower and turrets.

A Floor Clip Advertisement.

Redalon, Ltd., write: We have to apologise for an error in our advertisement for "Bull Dog" floor clips as used on Simpson's factory in the issue of *The Builder* of November 23. The picture shows the front portion of the building for which the architects were Messrs. Hobden and Porri, and not Messrs. Burnett and Eprile as stated, the latter being the architects for the second portion of the building. The contractors for the first part of the building were Messrs. Henry Kent (Builders), Ltd.

NEW INVENTION

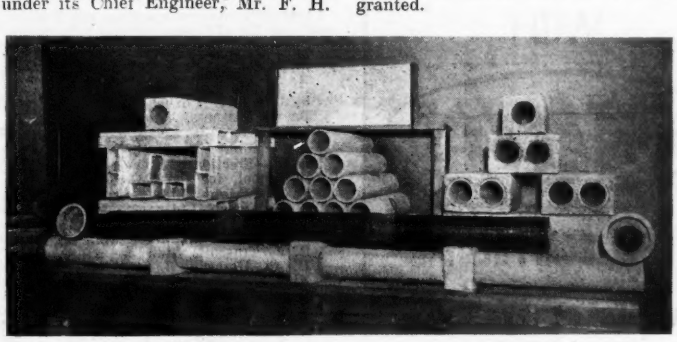
MOULDING CONCRETE AND MORTAR.

A NEW method of casting and moulding concrete and mortar has recently been invented, for which it is claimed that it enables such articles as pipes, tubes, ducts, posts and building blocks to be manufactured at a lower price than other existing methods.

The process consists, briefly, in the utilisation of perforated sheets of paper to act as binders and conveyors of mortar and concrete during the period of manufacture and in the initial stage of setting. Building blocks, for example, are manufactured by spreading mortar over a sheet of perforated paper and rolling the paper with a mortar ply round square mandrels. These mandrels can be easily extracted a few hours after rolling, leaving a perfect hollow section. The resilience necessary to maintain the shape is provided by the paper. Seven to eight hours after manufacture the tube can be handled and stocked. The paper in addition gives a perfect method of curing, and produces a satisfactory strong concrete without the necessity of further hydration. If it is necessary to reinforce the product by metal, the process lends itself well to that operation.

Concrete blocks of many shapes have been cast by this "Plycrete" process (see illustration). Principal advantages claimed are as follows:—Reduced weight of article without affecting its strength, or, alternatively, increase of strength without increase of weight; extreme simplicity and cheapness of plant and equipment, which permits the articles to be manufactured at the building site, with consequent reduction in cost of transportation and reduction of breakage; and the possibility of manufacturing articles by unskilled labour with uniformly satisfactory results.

The world patent rights for the Plycrete process are owned by Mr. P. Shishkoff, the inventor, and the rights are vested in a holding company, Plycrete, Limited. Certain of the processes have been successfully demonstrated to us, and those interested may view the process and inspect samples at 1, Peterborough Mews, Parsons Green, London, S.W.6, by appointment. We understand that licences to manufacture have already been granted.



A RANGE OF "PLYCRETE" PRODUCTS.

TENDERS

Communications for insertion under this heading should be addressed to "The Editor," and must reach him not later than Tuesday evening.

* Denotes *accepted.*
† Denotes *provisionally accepted.*
‡ Denotes *recommended for acceptance.*
§ Denotes *accepted subject to modifications.*
¶ Denotes *accepted by H.M. Government Departments.*

Aberdeen.—60 four-apartment houses and 180 three-apartment houses on ground at Froghall, adjoining the former Aberdeen Jute Works, for the T.C.:—

Brickwork—
*S. B. Russell, Aberdeen £34,296
Plumber work—
*W. Burnett, Aberdeen 9,699
Slater and roughcast—
*J. Durnin, Aberdeen 4,735
Painter work—
*R. Milne, Aberdeen 2,758
Electric light—
*J. B. Reid, Aberdeen 1,221
Railing and gates—
*W. Bain & Co., Ltd., Coatbridge 786

Aberdeen.—Reconstruction and addition in Loch-street, for the Northern Co-operative Society, Ltd. Messrs. Towse and Allan, architects and measurers, 10, Bon Accord-square:—

Excavation, brick and mason—*J. Shirras and Sons, Ltd.
Steel construction—*G. Bisset & Son.
Joinery, carpentry and ironmongery—*The Northern Co-operative Society, Ltd.
Plumber and sanitary—*J. Dean.
Plaster—*J. Scott & Sons (Aberdeen), Ltd.
Glazing—*A. Mackie.
(All of Aberdeen.)

Ardrossan.—New reservoir, for the T.C. Messrs. Bapter, Shaw & Morton, engineers, Blytheswood-square, Glasgow:—

*Andrew Cochrane, 172, St. Vincent-street, Glasgow £2,047

Arklow.—60 houses, for the U.D.C.:—

	Concrete	Brick.
H. & A. Hamilton, Waterford	£21,300 0	—
Mr. Daly, Drumcondra	20,400 0	£23,400 0
Thomas Brennan, Carnew	20,017 10	23,737 10
W. J. Clarke, Wicklow	19,931 15	23,551 15
O'Toole & Lee, Arklow	19,851 13	21,351 13
B. Maguire, Enniscorthy	18,328 0	19,828 0
M. J. Conway, Glenageary ...	17,700 0	—
Kelly & Sons, Westmeath	16,720 14	18,070 14
Andrew Doyle & Sons, Kells	16,466 10	16,946 10

Barwell.—Extensions to works, for Messrs. G. Ward (Barwell), Ltd. Mr. E. J. Williams, F.R.I.B.A., architect, 13, New-street, Leicester:—

*Bowles & Son, Leicester.

Beeston.—50 houses on Beeston Fields estate, between Central-avenue and Boundary-road, for the U.D.C.:—

*Holton & Son £13,425

Bilston.—108 houses on Bradley Lodge estate (Great Bridge-road), for the T.C.:—

*A. Boswell, Wolverhampton £27,892

Birkenhead.—Works, for the P.A.C.:—

Interior painting at institution—
‡Stott & Ward, Ltd. £1,167 0 0
Interior plastering at institution—
‡Adams Bros. (Liverpool), Ltd. ... 969 12 4

Birkenhead.—Eight shops and garages, off Kings-road and Mount-road. Messrs. Richard Owens & Son, architects, 3, Crosshall-street, Liverpool:—

*J. P. Jones, Bebington, Birkenhead.

Birmingham.—Rebuilding premises at 66, 67 and 68, High-street, for Messrs. Barklay's. Mr. E. S. Roberts, L.R.I.B.A., architect, Lombard House, Great Charles-street:—

*W. C. Skinner, Birmingham, 20.

Blackpool.—Factory at the corner of Coleridge-road, Devonshire-road and George-street, for Messrs. Waller & Hartley, Ltd., George-street. Mr. Halstead Best, F.R.I.B.A., architect, Leeds Buildings, 20, Clifton-street:—

Builders—*Herbert H. Vickers & Son.
Excavating, concreting, draining and bricklaying—*Herbert Joyce & Sons, Ltd.
Plumbing, glazing, painting—*H. Hartley.
(All of Blackpool.)

Blantyre.—Plumber works on 24 houses on Broom House site, for the Lanarkshire C.C.:—

*T. Porter & Son (Glasgow), Ltd., Glasgow £941 13 2

Brighouse.—Bank premises at the corner of Market-street and Bethel-street, for the Midland Bank, Ltd., 43, Poultry, London, E.C.2. Messrs. Whinney, Son & Austen Hall, F.R.I.B.A., architects, 37, Norfolk-street, Strand, W.C.2:—

*Lister, Brook & Co., Ltd., Brighouse.

Cambridge.—Adaptation of the Old Library, for a Committee of the Buildings Syndicate:—
‡Coulson & Son £59,490

Carlton.—44 houses at Cavendish-road, for the U.D.C. Mr. J. A. West, A.R.I.B.A., architect, Burton-road:—
34 houses—
*H. Loach & Son, Westdale-lane, Carlton £9,216
10 bungalows—
*Harper & Green, St. Austin's-drive, Carlton 2,085

Cheltenham.—Filter house and new laundry at Alstone baths, for the T.C.:—
*Amos Wilson & Sons £1,197

Chester-le-Street.—New block at the U.D.C. hospital. Mr. E. M. Lawson, architect, 19, Ridley-place, Newcastle:—
*W. Norman, West Lane, Chester-le-Street.

Chesterfield.—Premises, for the Chesterfield and Bolsover Joint Water Board:—
†A. Mason, Mansfield £15,000

Clonmel.—12 houses in Albert-street, for the T.C.:—

Welsh Bros.	£3,333
Roche, Morrissey & Keanedy	3,540
John O'Reilly & Sons	3,511
*Kavanagh Bros.	3,258

Coventry.—Hotel on the Roseycombe estate, Brandon-road, Binley, for the Northampton Brewery Co., Ltd:—
*E. Harris & Son, Coventry.

Doncaster.—Installation of a reredos, for the Rev. L. K. Knightall, The Vicarage, Woodlands, near Doncaster, and the Parochial Council of Woodlands Parish Church. Messrs. Wood & Oakley, F. & L.R.I.B.A., architects, 9, Eldon-square, Newcastle-on-Tyne, 1:—
*E. Bowman & Sons, Stamford.
(Estimated cost: £580.)

Dundalk.—24 houses, for the U.D.C.:—
*J. McGuinness £6,885

Dundee.—Meat Market, for the T.C. Mr. David McLay, architect, City-square:—

Excavation, brick and mason—	
*D. K. Symington	£1,150
Plumber—	
*J. Farquarson & Son	414
Steel construction—	
*Caledon Shipbuilding & Engineering Co., Ltd.	440
Joinery, carpentry and ironmongery—	
*J. L. Bruce	512
Plaster—	
*D. & A. Hunt	144
Wall tiling—	
*A. & R. Ingram	412

(All of Dundee.)

Durham.—The following tenders have been accepted by the C.C.:—

General repairs to Cleadon Council school—	
*J. Carter & Son, Sunderland	£238
Rebuilding boundary walls at the New Silksworth Council school—	
D. Glen, Jarrow-on-Tyne	172
Repairs to roofs at Oxhill Council schools—	
H. Ayton, Blackhill	240
Extensions to the laundry, Medomsley Cottage Homes—	
*Pallister Bros., Blackhill	837
New school at Lanchester—	
G. W. Lazenby & Co., Ferryhill	18,050(*a*)
Extensions to Bishop Auckland grammar school—	
G. W. Lazenby & Co., Ferryhill (about)	10,000
School clinic at Blaydon—	
G. Browell, Ltd., Blaydon	2,851(*a*)

(*a*) In lieu of tender withdrawn.

Enniskillen.—Construction of reservoir, for the R.D.C.:—

F. Moran, Irvinestown	£1,050
J. Jeffers & Sons	800
F. H. Browne, Enniskillen	785
*J. J. Scallon, Irvinestown	774

Epsom.—Internal decoration to Dorking-road and Castle-road houses, for the U.D.C.:—
‡C. Norrington, Epsom £296 12

Finedon.—Conveniences on the Recreation Field, Wellingborough-road, for the U.D.C. Mr. A. E Lloyd, surveyor:—
*Childs & Co., Finedon £217

Glasgow.—18 houses in Bardusie-street, for the T.C. Mr. William McNab, architect, Housing Director's Office:—

Excavation, brick and mason—			
*R. W. Stewart	£2,035	12	0
Joinery, carpentry and ironmongery—			
*Anderson & MacDonald	1,702	3	8
Slater—			
*P. Whyte & Co., Ltd.	269	15	1
Plumber and sanitary—			
*J. Paterson & Co. (Plumbers), Ltd.	8,021	10	3

(All of Glasgow.)

Glasgow.—63 houses, etc., in Syrian-street, for the T.C. Mr. William McNab, architect, Housing Director's Office:—

Excavation, brick and mason—			
*R. W. Stewart & Co.	£7,449	0	8
Joinery, carpentry and ironmongery—			
*H. Bradley	4,676	8	0
Slater—			
*Peter C. White & Co., Ltd.	928	8	10
Plumber and sanitary—			
*MacCulloch & Griffen	2,683	0	0
Glazier—			
*G. Henderson	118	1	5
Iron railings and gates—			
*A. Peters, Ltd.	292	7	11

(All of Glasgow.)

Glossop.—16 houses in Simmondley-lane, for the T.C. Mr. G. Faulds, Borough Engineer and Surveyor:—
‡C. H. Pike, Lodge-lane, Hyde.

Grantham.—Alterations and additions to hospital, for the Board of Management of Grantham and District Hospital. Messrs. Traylen & Lenton, architects, 16, Broad-street, Stamford:—
*Bernard Pumfrey, Ltd., Gainsborough.
(Estimated cost: £25,000.)

Helmsley.—Police station, for the North Riding C.C. Mr. J. R. White, F.R.I.B.A., architect, County Hall, Northallerton:—
*Wm. Birch & Sons, Ltd.

Helston.—12 dwellings, for the T.C.:—
*N. J. Jory & Son, Hayle £3,360

Hoddesdon.—Erection of Council offices in the High-street, for the U.D.C. Mr. F. W. Mutton, clerk:—

W. O. Porter, Ware	£9,565	0	
Lees of Enfield, Ltd., Enfield	8,795	0	
S. E. Moss & Sons, Chelmsford	8,500	0	
W. S. Try, Cowley	8,395	0	
Crook Bros., Ware	8,345	0	
R. J. Rowley, Ltd.	8,217	0	
Kidman & Sons, Ltd., Cambridge ...	8,186	0	
W. H. Gaze & Sons, Ltd., Kingston	8,160	0	
C. Miskin & Sons, Ltd., St. Albans	8,125	0	
F. Hitch & Co., Ware	8,047	10	
Walden & Son (Henley), Ltd., Henley	8,036	0	
Richd. Ginn & Son, Hertford	7,899	0	
G. E. Wallis & Sons, Ltd.	7,876	0	
J. Jarvis & Sons, Ltd.	7,855	0	
A. H. Winter & Son, Harpenden ...	7,819	0	
Sir Wm. Prescott & Sons, Ltd.	7,763	0	
Universal Housing Co., Ltd., Rickmansworth	7,750	0	
W. W. G. Parker, Ongar	7,735	17	
J. Dennis, St. Albans	7,699	0	
Hy. Norris & Son, Ltd., Hertford ...	7,693	0	
W. J. Cearns, Ltd.	7,680	0	
Ekins & Co., Ltd., Hertford	7,667	0	
A. E. Symes, Ltd.	7,600	0	
J. Honour & Son, Ltd., Tring	7,579	0	
M. J. Gleeson, Ltd., Worcester Park	7,552	0	
W. J. Haward, Hoddesdon	7,527	10	
Percy Bilton (Construction), Ltd. ...	7,400	0	
*Building and Public Works Construction Co., Ltd.	7,195	0	

(Remainder of London.)

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Horbury.—New bridge carrying the Horbury-Huddersfield-road over the River Calder, for the West Riding C.C. Mr. H. R. Hepworth, surveyor, County Hall, Wakefield:—
*F. Whitaker & Co.

Ireland.—Works for the Commissioners of Public Works:—
Altaghderry National School, County Donegal —improvements—*W. McClean & Sons, Newtownanningham.
Beggars Bush Barracks, Dublin — External painting — *Dockrell, Sons & Co., Ltd., Dublin.
Brownsgrove National School, County Galway —Improvements—*Fleming & Co., Dunmore.
Boolyglass National School, County Kilkenny —*H. & A. Hamilton, Waterford.
Cork District—painting works and supplies—*W. Crowley, Ballintempie, Cork.
Dublin district—electrical works and supplies—*Brooks, Thomas & Co., Ltd., Dublin.
Derrylehan National School, Sligo—school—*D. Dorrian, Mountcharles.
Drumshambo National School, County Leitrim —school—*F. Prior, Ballinamore.
Galway Employment Exchange—adaptations—*M. Birmingham, Galway.
Garda Siochana Depot—Garage and workshop—*Smith & Pearson, Ltd., Dublin.
Kilmurray Ibricane National School, County Clare—school—*T. Fitzpatrick, Kilmihill.
Kilbride Camp, County Wicklow—canteen and store—*A. P. Watkinson, Dublin.
Portobello Barracks, Dublin—mess and kitchen —*W. & J. Bolger, Ardee.
Phœnix Park district — painting and colour washing—*Dockrell, Sons & Co., Ltd., Dublin.
St. Patrick's Monastery, Co. Mayo—Improvements—*J. P. McCormack, Castlebar.

Isle of Ely.—Reconstruction of Horsemoor Bridge, March, and Honeysome Bridge, Chatteris, for the Highways Committee:—
*G. H. Greasley, Leicester £407 14s. 6d. and £592 15s. 2d. respectively.

Isle of Ely.—Police houses, for the Standing Joint Committee:—

At Chatteris—	
*Bristow & Melton, Chatteris	£1,061
At March—	
*Sayers Bros., Wisbech	1,020

Kells.—Four houses in Church-lane and five at Cross Carrick, for the U.D.C.:—

A. Doyle	£2,319 0
Matthew Tevlin	2,047 10
Richard Brennan	2,043 6
*Patrick McDonnell	1,696 0

(All of Kells.)

Kildare.—Bridge over Liffey at Droichead Nua, for the C.C.:—
*C. S. Downey, Waterford £14,716 12 11

Kilkenny.—School at Mooncoin, for the Vocational E.C.:—

P. Cantwell, Mooncoin	£1,497 0
Extra room	200 0
R. B. Nolan, Waterford	1,450 0
J. Walsh & Son, Ferrybank	1,445 0
Extra room	320 10
M. Walsh, Haggard, Glenmore	1,393 15
Extra room	256 10
Dowling Bros., Kilkenny	1,262 0
Extra room	242 0
*P. Roche, Ballycurran New Ross ...	1,210 0

Kingsbury.—Temporary Council school in Cotman-Gardens, Aerodrome estate, Stag Lane, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect.

Thompson, Bayliss & Co., Ltd., Rainham	£2,699
R. J. Truscot, Ltd., Forest Gate	2,683
J. Harrison & Co., Camberwell	2,589
Harrison Smith Buildings, Ltd., Birmingham	2,580
Kirk & Kirk, Ltd., Putney	2,330
‡Wm. Harbrow, Ltd., S. Bermondsey ...	2,219

Lancashire. — Reconstruction and widening Pasture-lane Greater County bridge on the Ormskirk-St. Helen's-road; reconstruction of Moss Bank County bridge on Billinge-St. Helen's-road, for the C.C. Mr. Peter Schofield, County Surveyor and Bridgemaster, Preston:—
*Morrison & Sons, Ltd., Liverpool.

Leyton.—Transformer station and store at Staffa-road, for the T.C.:—

Chessums, Ltd.	£650 10
H. J. Hallett	611 0
W. J. Clemens	575 0
H. C. Horswill, Ltd.	540 0
F. J. & F. G. Coxhead	520 0
*Barvis Partners, Victoria Chambers, Victoria-road, Romford	501 0

(All of London.)

Leyton.—Erection of a central kitchen at Harrow Green School, for the T.C.:—

A. E. Wright, Ltd.	£1,138 0
A. E. Symes, Ltd.	1,059 0
Lees of Enfield, Ltd.	990 0
Arthur Webb	898 0
R. J. Truscott, Ltd.	873 0
H. C. Horswill, Ltd.	866 0
Kind & Co.	858 0
Herbert H. Starke	820 15
S. C. Grover	792 0
E. A. Russell, Ltd.	788 0
C. J. Manning	787 0
W. J. Clemens	769 10
*F. J. & F. G. Coxhead	723 0

Leytenstone.—Erection of Granleigh-road Clinic, for the Leyton T.C.:—

	Brick construction.	"Tentest" construction
H. C. Horswill, Ltd.	£4,695 0 0	£4,770 0 0
H. J. Hallett	4,395 5 6	4,293 0 0
F. J. & J. G. Coxhead	4,389 0 0	4,193 0 0
W. J. Cearns	*4,316 0 0	4,202 0 0

Little Clacton.—Enlargement of Council school, for the Essex E.C.:—

*C. Deaves, Bures £2,480

London.—The following works contracts have been placed by the War Office during the week ended November 29:—

Longmoor—Married officers' quarters, Lee Bros. (Aldershot), Ltd., Aldershot.
Aldershot—Married soldiers' quarters, Enticknap Bros., Wormley.
Colchester—Bath annexes, W. C. Chambers & Sons (Colchester), Ltd. Colchester.
Oxford and Reading—Artificers' work, J. E. Harper & Son, Ltd., Birmingham.
Exeter—Dining room, Carkeek & Sons, Ltd., Plymouth.
Birtley—Repairs, etc., A. H. Earnshaw & Son, Darlington.
Aldershot—Alterations to stores—J. B. Edwards & Co. (Whyteleafe), Ltd., London, W.
Longmoor—Workshops and offices, Lee Bros. (Aldershot), Ltd., Aldershot.

London.—Tenders accepted by H.M.O.W. for the week ended November 29:—

Bath Station Sorting Office—erection—Spackman & Sons, Hunt-street, Swindon.
National Gallery—internal painting—J. Scott Fenn, Ltd., 42, William-street, Woolwich, S.E.18.
Ordinary works and repairs—Plymouth district—Pearn Bros., Ltd., Radnor-street, Plymouth; Gloucester district—A. Estcourt & Sons, 278, Barton-street, Gloucester; Ramsgate district—J. B. Sharman, Ltd., West Cliff-road, Ramsgate; Mansfield district — C. H. Hill, Contractor, Victoria-street, Mansfield; Doncaster district— J. H. Gilbert, 15, Cemetery-road, Doncaster; and Reading district—W. A. Murley, 54, London-street, Reading.
National Maritime Museum, Greenwich—installation of heating—G. N. Haden & Sons, Ltd., Lincoln House, Kingsway, W.C.2.
H.M. Stationery Office, Harrow—internal painting—A. H. W. Todman & Son, High-street, Wealdstone.
Smethwick Branch Post Office—alterations to sorting office and improvements to public office—J. E. Harper & Son, Ltd., 72/82, Lombard-street, Birmingham.
Adjustable swing seat standards for sorting tables—The Northampton Machinery Co., Ltd., St. Michael's-road, Northampton.
British Museum—construction of lift shaft—Higgs & Hill, Ltd., Crown Works, South Lambeth-road, S.W.8.
Somerset House—removal of and alteration to four goods lifts—Aldous & Campbell, Ltd., Lower Bland-street, S.E.1.
Bristol County Court—alterations—T. Weeks & Sons, Ltd., Ashton Gate, Bristol.
Berwick-on-Tweed Telephone Exchange and Employment Exchange—alterations and additions—P. Whitlie & Sons, Ivy-place, Berwick-on-Tweed.
Winsford Post Office — erection — Jones & Pugh, Pepper-street, Middlewich.
Hebburn & Jarrow Employment Exchange — J. Huntley & Son, Ltd., Villette Joinery Works, Marion-street, Sunderland.
Pallion (Sunderland) Employment Exchange—erection—J. Huntley & Son, Ltd., Villette Joinery Works, Marion-street, Sunderland.

London.—Interior decorative work at various dwellings, for the Westminster City Council:—

Walden House—	
W. H. Pratt & Son, Ltd.	£343 17 0
R. M. Pearson	311 15 0
W. Lilly & Co.	290 0 0
Sims & Russell	285 0 0
*J. Garlick (1910), Ltd.	284 10 0
Schomberg House—	
Sims & Russell	554 0 0
W. Lilly & Co.	547 0 0
F. Cope & Co., Ltd.	458 0 0
F. C. Hoskins & Co., Ltd.	393 0 0
A. J. & C. Hocking, Ltd.	384 1 9
*Hutchings & Keasley, Ltd.	334 19 6
Marshall-street dwellings—	
A. J. & C. Hocking, Ltd.	275 7 0
W. H. Pratt & Son, Ltd.	261 8 3
E. Hocking	251 2 10
W. Lilly & Co.	234 0 0
*Lapthorne & Co., Ltd.	168 5 0
St. James's dwellings—	
J. Garlick (1910), Ltd.	150 3 0
R. M. Pearson	142 17 0
Hutchings & Keasley, Ltd.	135 3 0
Sims & Russell	129 0 0
*W. Lilly & Co.	125 0 0

London.—Contracts placed by the Director of Works and Buildings, Air Ministry, during the week ending November 24:—

A.R. shed heating, Grantham—
Brightside Foundry & Engineering Co., Ltd., 17, Summer-row, Birmingham.
District heating, Henlow—
Brightside Foundry & Engineering Co., Ltd., 17, Summer-row, Birmingham:—
Foundations for "C" type sheds, Sealand—
T. Lowe & Sons, Ltd., Curzon-street, Burton-on-Trent.

London.—Renovations, etc., at 1 and 2, Cottages, New River Head, and 60, Amwell-street, Clerkenwell, for M.W.B.:—

Sims & Sims	£209 0
Jas. Webb & Son (Builders), Ltd.	143 10
E. A. Carvell	140 0
*J. Gotobe	138 0

London.—Temporary steel-framed building at the New River Head, E.C.1, for the M.W.B.:—

Rice & Son, Ltd.	£1,419 0 0
Callow & Wright, Ltd.	1,325 12 6
Mullen & Lumsden, Ltd.	1,278 0 0
William Moss & Sons, Ltd.	1,202 5 0
Grace & Marsh, Ltd.	1,126 13 0
*F. R. Hipperson & Son, Ltd.	1,112 5 7

Longbenton.—46 houses at Campertown, for the U.D.C. Mr. W. Bean, surveyor:—

R. Carse & Sons	£12,478 0
M. J. Liddell & Son	12,012 0
*A. Best, Newcastle-road, Newsham, Blyth	11,544 18

Manchester.—Extensions to Yew Tree municipal school, Wythenshawe, for the E.C. Plans prepared in Architect's Department, Education Offices, Deansgate:—

Steelwork—*J. E. Norris & Co., Ltd., Chequerbent, near Bolton.
Mason—*S. & J. Whitehead, Oldham.
Rock asphalt and dampcourse—*J. Dickinson and Co. (Bolton), Ltd., Bolton.
Granolithic—Stuart's Granolithic Co., Ltd., Manchester.

Manchester.—For (*a*) foundations and roof work for boiler-house, and (*b*) alterations and additions to coal bunkers at Stuart-street generating station, for the E.C. Mr. H. C. Lamb, Chief Engineer, Town Hall:—

(*a*) *J. H. Billings & Co.
(*b*) *Normanton's, Ltd.
Steelwork—*Redpath, Brown & Co., Ltd.
Carpenter and joiner—*Campbell and Armstrong.

(All of Manchester.)

Manchester.—Medical library, refectory, assembly hall, swimming pool and fives courts, for the Council of the Manchester University, Oxford-road. Messrs. Thomas Worthington & Sons, FF.R.I.B.A., 178, Oxford-road:—

*G. & W. Smith (Builders), Ltd., Manchester.
(Estimated cost: £45,000.)

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Middlesbrough.—Shops, houses and offices in Eastbourne-road, for Messrs. Thompson's Enterprises, Ltd.:—

*G. W. Lazenby & Sons, Ferryhill, Co. Durham.

Middlesbrough.—Extensions to the maternity hospital and laundry. Mr. S. E. Burgess, Borough Engineer:—

*Stephen Coates, Ltd., Lanbaugh-place, Middlesbrough.

Middlesex.—External work in connection with the electrification of Wild Farm and Margaret Cottages, for the Middlesex C.C. County Architect:—

*W. J. Furze & Co. £868

Netherne.—Four pairs of cottages, drainage work, etc., at the Netherne Mental Hospital, for the Surrey C.C.:—

*H. Punter, Seale £4,974

Netherton.—For the Clydesdale-row's housing scheme, for the Lanarkshire C.C. Mr. Peter C. Smith, Lanarkshire County Housing architect, Hamilton:—

Excavation, brick and mason—*T. Anderson and Sons, Hamilton.
Joinery, carpentry and ironmongery—*James Struthers, Bellshill.
Slater and roughcasting—*S. Holmes, Rutherglen.
Plumber and sanitary—*S. Lauder, Uddingston.
Plaster—*Hugh McLatchie & Sons, Larkhall.
Painter—*J. C. Sweet, Hamilton.

North Wembley. — Extensions to Byron Court Council School, Spencer-road, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect:—

F. D. Hidden & Co., Ltd., Brentford	£1,764 2
W. S. Try, Cowley, Uxbridge	1,657 0
Y. J. Lovell & Son, Gerrards Cross	1,548 0
Haymills, Ltd., Wembley Park	1,455 0
‡G. H. Dibblin, Ltd., London	1,443 0

Northampton.—Internal and external renovations at Welford-road hospital, for the C.B.:—

*Harry Lane £313

Northampton.—Electrical work at the new fire station, for the C.B.:—

*"Grensells," 11, Princes-street, Kettering £1,444 3 7

Northampton.—For swimming, slipper and Turkish baths at Upper Mounts site, for the T.C.:—

‡A. Glenn & Sons, Ltd., Northampton	£46,725
Wilson, Lovatt & Sons, Ltd., Wolverhampton	£46,710
Parsons & Morriss, Ltd., Birmingham	£45,633 (withdrawn)

Norwich.—Alterations and additions to factory Esdelle-street and Edwards-street, for Messrs Shorten & Armes. Mr. J. Owen Bond, F.R.I.B.A. architect and surveyor, 26, Tombland:—

J. Youngs & Son, Norwich	£1,958
F. R. Hipperson & Son, Ltd., Trowse, Norwich	1,857
T. Gill & Son, Norwich	1,854
R. G. Carter, Ltd., Drayton	1,800

Norwich.—New house at Cringleford, for Mr. C. S. Rosson. Mr. J. Owen Bond, F.R.I.B.A., architect and surveyor, 26, Tombland:—

W. S. Lusher, Norwich	£2,161
J. Youngs & Son, Norwich	2,038
T. Gill & Son, Norwich	1,978
G. W. Gooch & Son, Norwich	1,936
R. G. Carter, Ltd., Drayton	1,900

Nottingham.—New canteen at William Crane Schools, Aspley housing estate, for the E.C. Mr. T. Wallis Gordon, City Engineer:—

†T. Long & Son, Nottingham £1,899

Paisley.—New public school in Renfrew-road. Messrs. Charles Davidson & Son, architects, High-street:—

Excavation, brick and mason—*C. Johnstone, Ltd.
Joinery, carpentry and ironmongery — *J. Y. Keenie, Ltd., Johnstone.
Slater and roughcasting—*J. Gemmele.
Plaster—*George Rome & Co. (Glasgow), Ltd., Glasgow.
Plumber and sanitary—*J. Wilson & Sons.
Painter and decorative—*W. Sweenie & Sons.
Electrical installation, fittings, etc.—*W. Baird & Sons, Scotstoun.
Heating installation and fixtures — *C. N. Haden & Sons, Ltd., Glasgow.
Asphalte—*Scottish Speedwell Co., Ltd., Glasgow.

(Remainder of Paisley.)

Preston.—Installation of a domestic hot-water supply in new dock offices, for the T.C.:—

*S. B. Wilding & Sons, Ltd. £135

Pulborough.—New one-span bridge adjoining existing Swan Bridge, for the West Sussex U.D.C.:—

*J. Howard & Co., Poole £11,676 18 2

Pwllheli.—Development of the Mount Pleasant site for shops, café and offices, etc. Major B. Clough Williams-Ellis, F.R.I.B.A., architect, Romney's House, Holly Bush Hill, Hampstead, N.W.3:—

*W. F. Humphreys, Ltd., Ruabon.

Ruislip.—New Council school, Dawlish-drive, for the Middlesex C.C. Mr. W. T. Curtis, F.R.I.B.A., County Architect :—

A. E. A. Prowting, Ltd., Ruislip	£23,948	2	6
F. D. Hidden & Co., Ltd., Brentford	19,705	0	0
W. S. Try, Cowley, Uxbridge ...	19,669	0	0
Y. J. Lovell & Son, Gerrards Cross	19,544	0	0
G. H. Dibblin, Ltd., London, E.C.1.	19,072	0	0
‡Haymills, Ltd., Wembley Park	18,920	0	0

Salford.—Supply and delivery of approximately 500 lin. yds. of self-adjusting iron railing required in connection with the Charlestown footbridge, for the T.C. :—

*Bayliss, Jones & Bayliss, Ltd., Wolverhampton £254 3 4

Salford.—Supply, erection and painting of steel work and the construction of the abutments to the Charlestown footbridge, for the T.C. :—

*Banister, Walton & Co., Ltd., Trafford Park £3,850 10 9

Scarborough.—208 houses on Prospect Mount estate, for the T.C. Mr. J. Paton Watson, Borough Engineer :—

*Mollekin Bros., Maltby, near Rotherham £66,716

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Scunthorpe.—Wing to the War Memorial Hospital :—

*Quibell & Hardy £8,859 3 4

Selby.—Four non-parlour houses in West End, Wistow, for the R.D.C. Mr. R. F. Braithwaite, surveyor, 22, Park-street :—

*A. Garbutt, Cawood £1,256

Sheffield.—For (*a*) waiting-room accommodation, etc., at the Education Offices; (*b*) installation of electric light, etc., at the Hartley Brook Council school; (*c*) heating apparatus in the junior "A" department of the Woodthorpe Council school, for the E.C. Mr. W. George Davies, F.R.I.B.A., City Architect :—

(*a*) *T. Roper & Sons, Ltd. £338
(*b*) *T. H. & W. Cockayne, Ltd. 595
(*c*) *Rosser & Russell, Ltd., Leeds 1,143
(Remainder of Sheffield.)

Stafford.—24 houses on the Tillington estate, for the T.C. :—

‡W. Whittingham, Wolverhampton... £6,901 12

Surrey.—Erection of temporary hutments at Murray House, for the C.C. :—

*E. Clarke & Sons, Ltd., Addlestone £407 13 8

Sutton Coldfield.—For (1) combined shelter and public sanitary conveniences near Banners Gate, and (2) public conveniences near Wyndley Pool, Sutton-park, for the T.C. :—

(1) ‡Isaac Langley, Chester-road, Tyburn, Birmingham £738
(2) ‡Isaac Langley, Chester-road, Tyburn Birmingham 501

Thurnscoe.—50 bungalows for aged persons at Low Grange Field, Houghton-road, for the U.D.C. Mr. H. R. Bridger, surveyor :—

*Direct Labour £10,900

Tilbury.—Two departments at the junior school, for the Essex E.C. :—

*Hosking & Son, Rayleigh £16,036

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